RAILROAD

MAGAZINE | APRIL 50c

100 YEARS OF CIRCUS TRAINS

Rails Play a Key Role in the Glittering Drama of the Big Top

This low-rate, broad coverage

HOSPITALIZATION

offers you extra money protection not available under any group plan

TODAY AVAILABLE TO INDIVIDUALS!

People who are standard risks under White Cross have never suffered a general rate increase

Isn't this the kind of protection you have always wanted?

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Low rates and broad coverage of the WHITE CROSS PLAN make it possible for you to include every member of your family without joining a group.

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Under the WHITE CROSS PLAN you're free to select any hospital you wish—to use your own family doctor, or to call in a specialist if one is needed!

WE PAY YOU DIRECT

As soon as your claim is approved, we send the money to your hospital, to your doctor, or to you self—just as you direct.

YOU NEEDN'T BE A BED-PATIENT TO COLLECT YOUR BENEFITS

You can get cash payments when doctor treats you in his office or at your home. Even money for many out-of-the-hospital medical expenses such as lab work, medicines, transfusions, etc.

TAKE ALL OR ANY PART OF THIS PLAN

You decide just what protection you want. You take as much or as little of the Plan as you wish. Even if you have hospitalization or some other insurance plan, you can secure *additional* protection and *extra* benefits under the WHITE CROSS PLAN.

PREMIUMS MAY BE PAID TO FIT YOUR BUDGET

There is no fixed mode of payment. You pay your premiums monthly, quarterly, twice-a-year, or annually . . . whichever is easiest for you.

NO FINE PRINT!

The cash payments described are only a condensed outline of the many benefits available under the WHITE CROSS PLAN. You'll find all the benefits, exceptions and limitations clearly stated in big legible type in the policies. Accident benefits begin immediately from date of policies. Sickness benefits cover all illnesses originating after policies have been in force 30 days, except those few plainly stated in the policies. Mail coupon today for information.

New policy can pay UP TO $5,000 for a single serious illness or injury

This policy (P-86) actually starts to pay where ordinary insurance stops! It keeps right on paying right up to $5000—every separate time you are sick or hurt. And yet, because of the coinsurance and deductible features, this policy may cost you no more than you now pay for some kind of insurance that limits payments!

New health policy pays CASH even if you never get sick!

This policy (NC-701) guarantees to pay you the full face value (from $2500 to $5000 for men, from $3000 to $7500 for women) even if you are never sick a day in your life! You get the full face value, either as a cash refund, or as money to help pay medical bills. This protection is guaranteed renewable until age 75, or until you get the full face value in cash benefits.

UP TO $200 A MONTH FOR LIVING EXPENSES

You decide in advance—at the time you apply for your policy (P-16)—how much you will need for household expenses. Wage-earners can get from $50 to $200 a month—depending on the amount stated in policy. Up to a full year for sickness and up to *two* years for injury when disabled, unable to work, and confined under a doctor's care—either in the hospital or at home.

PAYS AS MUCH AS $250 for "EXTRAS"

You can get cash for many hospital services not ordinarily covered. Policies (P-6 and P-89) provide specified amounts for operating room, anesthetics, x-rays, drugs, dressings, medicines, ambulance, laboratory tests, and many others.

YOU CAN GET UP TO $1500 FOR HOSPITAL BILLS

Under the WHITE CROSS PLAN you can get from $6 to $15 a day (depending on room rate stated in your P-6 policy)—up to 100 days for each different sickness or injury, for each member of your family.

MATERNITY BENEFITS

You can get up to ten times the daily rate in your policy P-6 or P-85 for childbirth or any complications of pregnancy or miscarriage after waiting periods specified in the policies . . . and $50 additional from P-89.

Specified Cash Payments for DOCTOR BILLS up to a total of $150 for each illness or injury

You are covered by Policy P-89 for doctor treatments at home ($3 per day), doctor's office or hospital ($2 per day). Benefits begin with first treatment for injury, third treatment for sickness.

EXTRA INCOME . . . for you while in the hospital

Under the WHITE CROSS PLAN disability income is increased one half your first two months in the hospital. If your P-16 policy specifies $200 a month, you actually receive $600 for the first two months you are in the hospital and $200 a month thereafter.

$5 TO $250 FOR SURGICAL FEES

By combining surgical benefits available in the policies, in lieu of treatments, you can get up to $250 for surgery performed on any member of your family. Each policy P-6-P-89 lists amounts for various operations.

$1,000 TO $4,000 FOR ACCIDENTAL DEATH

(Provided in Policy P-16.)

Costs you nothing to find out about this LOW-RATE PROTECTION

Now, before you're faced with unexpected doctor and hospital bills—find out about this Plan that protects your entire family at such low rate. Send the coupon today for FULL information. It costs you nothing. There is no obligation. It takes only a minute to mail the coupon, but it can save you money that would take you months to earn. Do it NOW.

Low rates, cash benefits and prompt payments of claims make the famous White Cross Plan the fastest growing plan in America

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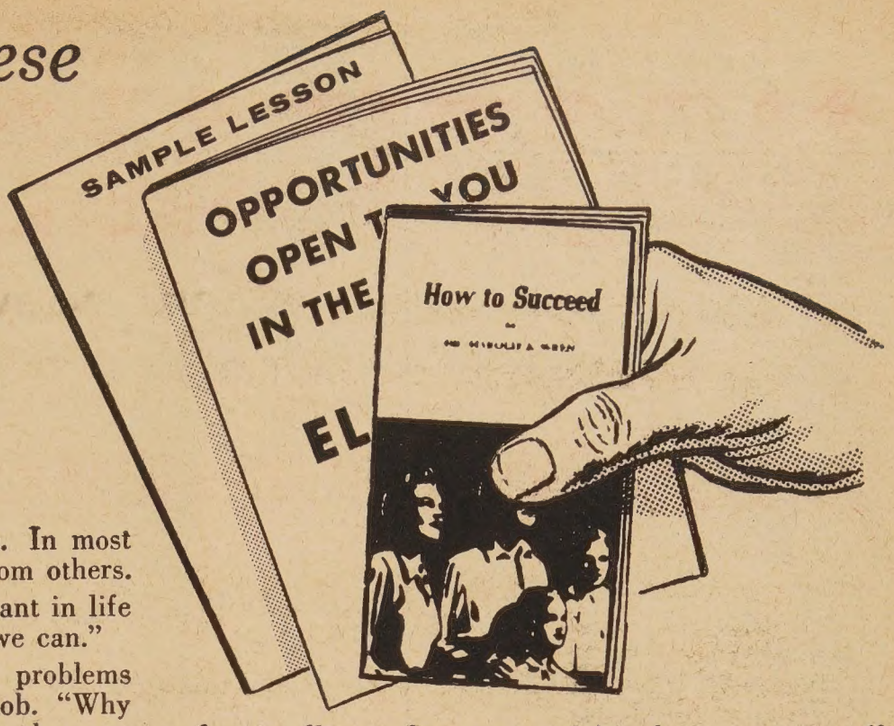

Life's problems are never simple to solve. In most cases they require help and inspiration from others.

It was Emerson who said—"Our chief want in life is somebody who shall make us do what we can."

Perhaps one of today's most common problems has something to do with an individual's job. "Why can't I make more money?". . ."Will I be the next to be fired?". . ."Why are others promoted over me?" are some of the questions that plague most of us at some time or another.

If you wonder about *your* job security, about your future, here's help that is yours for the asking. Three FREE BOOKS—any one of which could change the course of your entire life.

Don't put it off. If you are really interested in succeeding, send for these three free books today. Remember, hesitation is one of the greatest causes of failure.

Book No. 1, "How to Succeed," is a gold mine of tips on how a hundred little things about you, your personality, your outlook on life can affect your future. It will help you discover hidden talents in yourself, it will show you how others—less educated, less intelligent than you, perhaps—have overcome all sorts of obstacles and have gone on to success.

Book No. 2 is a complete catalog that outlines opportunities in the field in which you are most interested. It gives you the facts on just what your chances are of succeeding in a given field.

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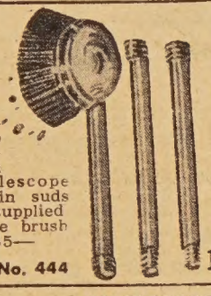

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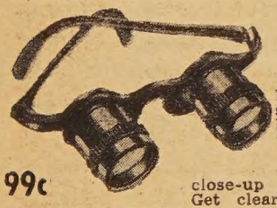

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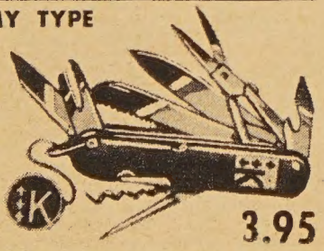

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RAILROAD MAGAZINE

The Magazine of Adventurous Railroading—Founded 1906

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• **GAME WARDEN.** A rewarding job for the conservation-minded sportsman! Wardens protect wildlife, apprehend law violators . . . often supervise refuges, feeding stations, make game counts, tag wildfowl, etc. Starting salaries are often about $3410 per year. Opportunities galore in this general field! Prepare Now—at Home!

• **GOVT. HUNTER.** You *can* hunt and get *paid* for it! Most states have a predatory animal problem—hire hunters to trap, shoot and poison mountain lions, coyotes, wolves, etc. Some states pay up to $150.00 bounty per major predator *plus salary*. Skilled hunters may earn up to $750 and more, in one month! Education requirements are almost non-existent — *hunting "know how" is what counts!*

• **FORESTRY WORK.** Stimulating career for the man who loves the great outdoors! Work amid towering timber, crystal clear mountain streams, crisp, bracing weather. Rangers protect trees against fire, insects, diseases . . . supervise patrols, construction crews. Beginners often start at about $300 monthly. Opportunities now open in many areas! Prepare now—at home!

• **FISH HATCHERY WORK.** A job a fisherman might dream about! Artificially propagate trout, bass, pike, etc. . . . stock depleted lakes and streams. Workers keep daily food and growth records, ship eggs and fry . . . construct and maintain hatchery equipment. Beginners start at up to $300 monthly. Foremen earn up to $7000 yearly. Almost *unlimited* opportunities. Prepare NOW—at home!

• **PRIVATE FISHERIES & GAME FARMS** Because of increasing hunting and fishing pressure, private preserves, farms, "Catch 'em Yourself" Trout Pools are springing up all over the U.S. These establishments urgently need qualified employees. They are in business to *make money*—pay well above average. Prepare NOW—at home!

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" have never read or seen anything that gave the would-be wildlife worker such a wonderful background and general orientation on job opportunties in this field! . . . should prove of great value to anyone wanting (an outdoor career)."
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". . . tremendously helpful. I am now employed by U. S. Dept. of Agriculture, Forest Service, and hold title of Fire Control and G.S.-3. Started at $2,950.00." Jess Snyder, Ohio

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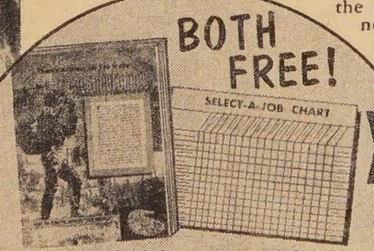

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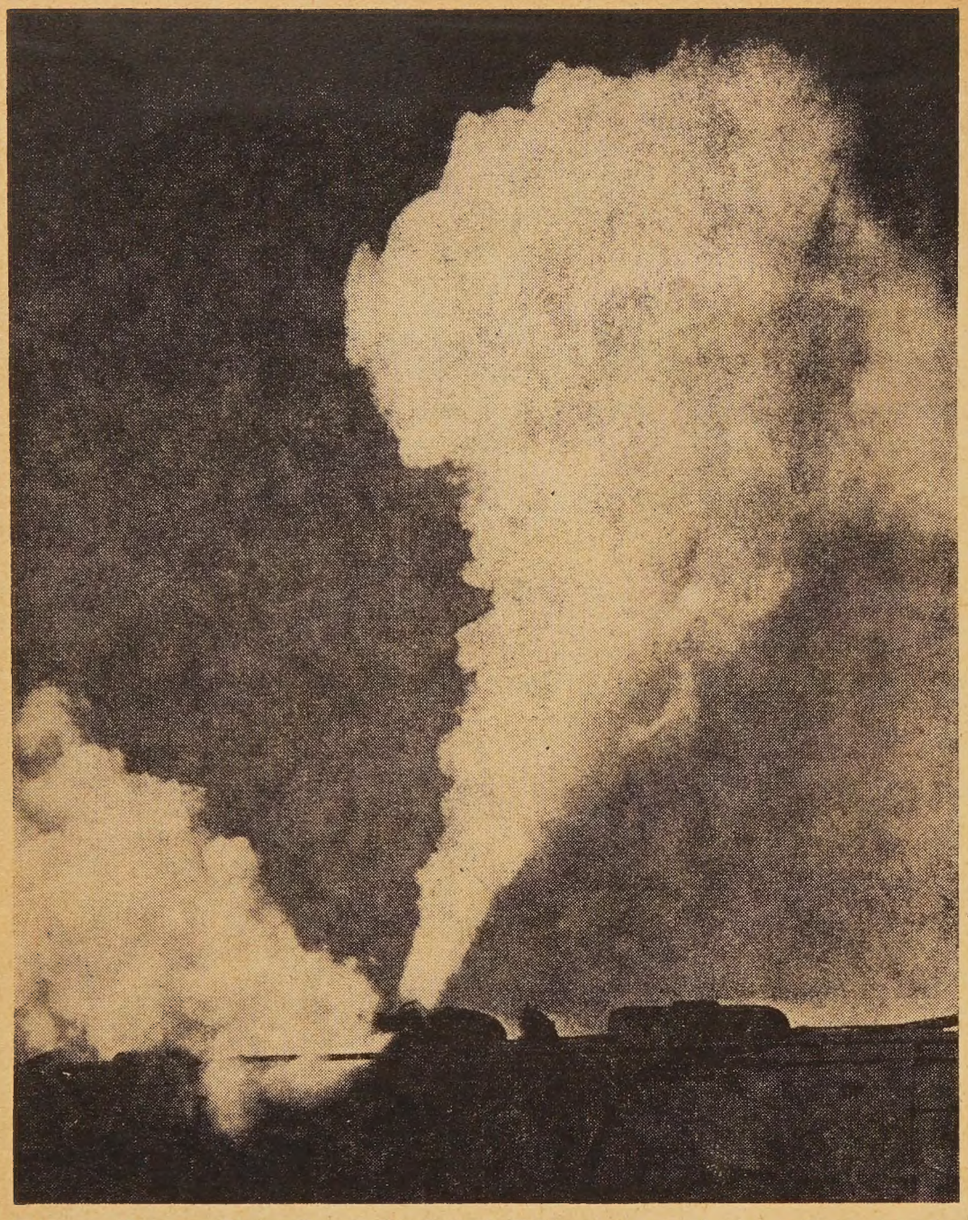


Letting off steam. Bryan Beard, Norfolk & Western master photographer, made this N&W locomotive shot with the aid of a red filter. He also produced the Kodachrome on our front cover this month. Other shots by Mr. Beard will appear in future issues.

MAIL CAR

Running Orders, Waybills, and Sandhouse Gossip—from Railroaders, Fans, and the Editorial Crew

DAY AND NIGHT. The pay cars described in our last issue ran only in daytime. The circus trains featured in this issue are overnight specials that almost never run in daytime. •

REMOTE CONTROL recently guided a railroad passenger car for the first time in American history. The demonstration took place on the 7½-mile stretch of New Haven track between New Rochelle and Rye, N.Y. One of the road's new self-propelled commuter cars was started, stopped, speeded, and slowed down from a central panel on Larchmont station platform. Aboard were 75 newsmen, railroad officials, and representatives of Union Switch and Signal Division of Westinghouse Air Brake Co., which manufactured the equipment.

The operation was merely an extension of the electronics mechanism now used to control switches and signals over areas as long as 400 miles. The electrical impulses in this test, transmitted by radio and existing signal wires, operated the throttle and brakes. •

102 MILES PER HOUR is top speed for the new experimental lightweight train which the Pennsylvania Railroad has just put into New York-Pittsburgh service, cutting the running time between those two points by two hours. This "aero-train," as it is called, was designed and produced by General Motors. Its ten coaches have aluminum bodies mounted on steel frames. These coaches, the Pennsy maintains, are 50 percent lighter and 60 percent less expensive to build and operate than standard coaches. The lightweight locomotive is powered by a 1200 hp. diesel engine.

This spring the Pennsy also plans to experiment with new "tubular" trains made by the Budd Company. •

TWO trackside graves 20 paces apart, with a paling fence around each, may be seen on a ledge above the Denver & Rio Grande Western right-of-way seven or eight miles south of Leadville, Colo. There is a legend to the effect that around 1897 two hotheaded young fellows fought a duel there over a girl, killing each other, and a Rio Grande section crew buried the bodies on the spot. •

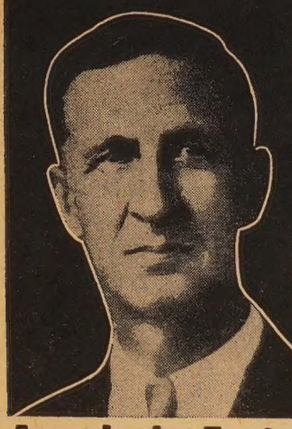
FRONT COVER shows a Norfolk & Western train, first 53, running alongside the blue water of a trout stream, Back Creek, south of Roanoke, Va., on the scenic Winston-Salem District of the Shenandoah Division. The engine, No. 2178, Class Y6b, is run by Engineer J. B. Hale and Fireman P. C. Cabiness; and the bright color-shot was made by Bryan Beard, N&W master photographer.

Shortly after World War I the Norfolk & Western's photographic staff consisted of one cameraman, John R. Sheen, and a laborer who helped to carry his heavy view camera and sensitized glass plates on assignments. Sheen persuaded the company to give him a young assistant whom he could teach photography. Bryan was that assistant.

Asked why he took up photography, the youth said, "I needed the job." Since then, countless N&W officials have come to realize that "the job needed Bryan Beard." In 1920 Sheen retired and Bryan took over. Today, in his 38th year of Norfolk & Western work, B. B. heads a staff of eight expert railway photographers.

Making train pictures tests the skill of the best. Besides general photographic knowledge, you need a strong back and lots of patience for treks with full equipment along the right-of-way. Sometimes you wait hours for the right train, the right clouds, and the right

I WILL TRAIN YOU AT HOME FOR GOOD PAY JOBS IN RADIO-TELEVISION



J. E. SMITH has trained more men for Radio-Television than any other man. OUR 40th YEAR.

America's Fast Growing Industry Offers You Good Pay—Bright Future—Security

I TRAINED THESE MEN

"Started to repair sets six months after enrolling. Earned $12 to $15 a week in spare time."—Adam Kramlik, Jr., Sunneytown, Pennsylvania.

"Up to our necks in Radio-Television work. Four other NRI men work here. Am happy with my work."—Glen Peterson, Bradford, Ont., Canada.

"Am doing Radio and Television Servicing full time. Now have my own shop. I owe my success to N.R.I."—Curtis Stath, Ft. Madison, Iowa.

"Am with WCOC. NRI course can't be beat. No trouble passing 1st class Radio-phone license exam."—Jesse W. Parker, Meridian, Mississippi.

"By the time I graduated I had paid for my course, a car and testing equipment. Can service toughest jobs."—E. J. Streitenberger, New Boston, Ohio.

AVAILABLE TO VETERANS UNDER G.I. BILLS

Training plus opportunity is the PERFECT COMBINATION for job security, good pay, advancement. In good times, the trained man makes the BETTER PAY, GETS PROMOTED. When jobs are scarce, the trained man enjoys GREATER SECURITY. NRI training can help assure you more of the better things of life.

Start Soon to Make $10, $15 a Week Extra Fixing Sets

Keep your job while training. I start sending you special booklets the day you enroll, that show you how to fix sets. Multitester built with parts I send helps you make $10, $15 a week extra fixing sets while training. Many start their own Radio-Television business with spare time earnings.

My Training Is Up-To-Date

You benefit by my 40 years' experience training men at home. Well illustrated lessons give you basic principles you need. Skillfully developed kits of parts I send (see below) "bring to life" things you learn from lessons.

You Learn by Practicing with Parts I Send

Nothing takes the place of PRACTICAL EXPERIENCE. That's why NRI training is based on LEARNING BY DOING. You use parts I furnish to build many circuits common to Radio and Television. As part of my Communications Course, you build many things, including low power transmitter shown at left. You put it "on the air," perform procedures required of broadcasting operators. With my Servicing Course you build modern Radio, etc. Use Multitester you build to make money fixing sets. Many students make $10, $15 week extra fixing neighbors' sets in spare time while training. Coupon below will bring book showing other equipment you build. It's all yours to keep.

The Tested Way To Better Pay!

Television Making Good Jobs, Prosperity—Even without Television, Radio is bigger than ever. 115 million home and auto Radios to be serviced. Over 3000 Radio broadcasting stations use operators, technicians, engineers. Government, Aviation, Police, Ship, Micro-wave Relay, Two-Way Radio Communications for buses, taxis, trucks, etc., are important and growing fields. Television is moving ahead fast.

About 200 Television stations are now on the air. Hundreds of others being built. Good TV jobs opening up for Technicians, Operators, etc.

25 million homes now have Television sets. Thousands more are being sold every week. Get a job or have your own business selling, installing, servicing.

Radio-TV Needs Men of Action—Mail Coupon

Act now to get more of the good things of life. Actual lesson proves my training is practical, thorough. 64-page book shows good job opportunities for you in many fields. Take NRI training for as little as $5 a month. Many graduates make more than total cost of training in two weeks. Mail coupon now. J. E. SMITH, President, National Radio Institute, Dept. 6CR Washington 9, D. C. OUR 40TH YEAR.

Good for Both—FREE

The ABCs of SERVICING

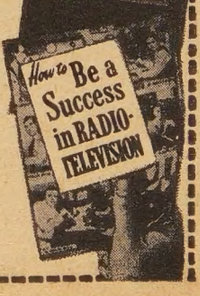
MR. J. E. SMITH, President, Dept. 6CR4
National Radio Institute, Washington 9, D. C.
Mail me Sample Lesson and 64-page Book, FREE.
(No salesman will call. Please write plainly.)

Name.....Age.....

Address.....

City.....Zone....State.....

VETS write in date of discharge .....



light. Often you spend hours preparing for the brief click of a shutter that registers a Mallet with a string of 100-odd freight cars on her tail.

"One of the first things a company photographer learns," says Bryan, "is that it's just as important to know what *not* to shoot as it is to know what to shoot."

On the forbidden list, for example, is black smoke pouring from an engine stack. The N&W is the last major American railroad still powered almost entirely by steam. Its mountainous terrain between Norfolk and Cincinnati means hard pulls for the steamers. You need cooperation from train and engine crews to avoid excessive smoke and to reduce speed while pictures are being made. One annoyance is the telegraph pole or other obstacle that hides choice views from your camera's eye.

Company photography is much more than just trains. The N&W staff must picture a wide range of subjects for the railway's various departments. Beard has photographed many celebrities, including Presidents Coolidge, Hoover, F. D. Roosevelt, and Eisenhower campaigning in N&W territory.

Today, at 54, the energetic B. B. still walks the tracks and climbs steep vantage points to get good pictures. He is also a cyclopeadia of useful information. Home address: 2416 Avenham Ave., S. W., Roanoke. •

DON'T let anyone tell you that sentiment has gone out of railroading. Take the case of Colonel Roy B. White. Back in 1900, at age 17, White began a notable rail career as a ham operator on the 306-mile Cincinnati, Indianapolis & Western. A decade later, when the ambitious youth had risen to superintendent's rank, the CI&W was taken over by the Baltimore & Ohio but without losing its corporate identity. That sort of thing often happens to short lines.

Col. Roy B. White

More time passed. In 1941 White became B&O president. This job included the presidency of the subsidiary line on which he had once pounded brass. White has always loved that road. In 1953, when he retired from the B&O presidency and was appointed chairman of the board—a customary procedure—the old lightning slinger persuaded his fellow directors to let him remain as president of the little CI&W.

And now, on April 17th, the Colonel begins his 56th year of railroading. It all started in the telegraph bay of an old Indianapolis depot where he timidly copied his first train order. •

WHAT would you do? Thomas O. Acree, a retired Southern train dispatcher, recalls that he had some odd experiences with train and engine crews relative to interpreting train orders. Here is one of them: On the afternoon of June 15, 1915, at Monroe, Va., the following form 19 order was given to Engineer Charles Hall and Conductor James Allbright of the Southern Railway on a southbound first-class passenger train, No. 35:

Thomas O. Acree

No. thirty-five (35), engine 1209, meet No. thirty-six (36), engine 1312, at Sycamore, Mo. No. thirty-six (36) take siding.

Later, another order was issued to both of the trains, reading:

No. thirty-five (35), engine 1209, meet No. thirty-six (36), engine 1312, at Motleys *instead of* Sycamore.

Nos. 35 and 36 arrived at Motleys about the same time. Both went down the main line and could have had a head-on collision had they not been running slowly. Which train crew was wrong interpreting the orders? (Answer on page 56.) •

ALTHOUGH a New York railfan, Larry Cohen, advises us to increase our circulation by using more technical data, he adds: "Most of the articles in *Trains* magazine are rather technical, but I prefer *Railroad* because it is more personal and more friendly. Three of my pals have said that they buy *Railroad* mainly because of its *Switch List* and its *Steam Power* section."

Another railfan, Robert A. Ramsay of Los Angeles, comments: "In your magazine I like best the occasional good historic pieces, locomotive rosters, book reviews, *Information Booth,* and *Switch List.* Once in a while you have an interesting bit in the electric section. Your true tales and fiction leave me cold, and I skip the nostalgia of 'the old days.' "

A former New York Central towerman and longtime reader of this magazine, R. G. Cornelius, 132 E. Market St., Rhinebeck, N.Y., writes: "I like *Railroad* mainly for its oldtime true tales and articles, its *Information Booth* (Miss Kreimer is doing a fine job), and its *Mail Car.* I also like fiction stories that deal with steam."

Listen now to a retired Canadian National hogger, Frank W. Powers of North Kamloops, B.C.: "Don't put too much detail in your historical stuff. It gets monotonous. I, for one, welcome anecdotes, railroad slang, and bits of humor. Go strong on true tales and short stories, especially those with heart appeal. Engineer W. J. Thompson, who lives with us, says that what I have just written goes for him, too."

Trying to please everybody is a pretty tall order. We are tempted by the advice of Joseph M. Peters, a seafaring man on the U.S.S. *Brant:* "Pay no attention to the hecklers. Just cram *Railroad* full of anything that has to do with flanged wheels rolling on steel rails."

Maybe he's right. But we would like to know how fiction-lovers feel about our reprinting famous railroad stories such as Harry Bedwell's "Sun and Silence," on page 58 of this issue. •

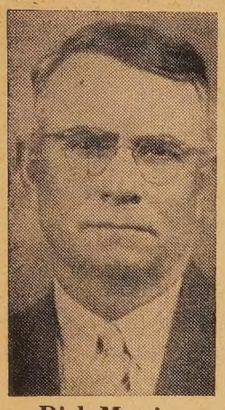
PASSENGERS traveling by train or bus across state lines in the U.S.A. can no longer be racially segregated, under an Interstate Commerce Commission order that was scheduled to go into effect early this year. The same applies to station toilets and waiting rooms. This ruling is in accordance with principles laid down by the United States Supreme Court in deciding upon the de-segregation of public schools and public recreation facilities. The highest court also outlawed the compulsory separation of Negroes from whites on train diningcars.

Privately, many railroad officials in the South favor the newest ruling because it enables them to utilize passenger-train space more efficiently. One big southern road, the Texas & Pacific, dropped racial aloofness on its through trains years before the ICC action.

Right now the situation is confused. Southern state laws still call for racial separation in *local* train and bus travel, although in some areas these ancient laws are ignored. The national trend is away from segregation. There was a time, long ago, when New York City actually had separate streetcars for pas-

sengers of light and dark skin! How they classified riders with ruddy or olive complexions we don't know. •

PAY-CAR article (Feb. issue) brought back memories to a retired Louisville & Nashville engineer, Dick Martin, 712 Bell Ave., Tarrant, Ala. As an extra, Dick used to pull the company's pay car on what were known as the "mineral branches" out of Birmingham, Ala., when the regular hogger was off.



Dick Martin

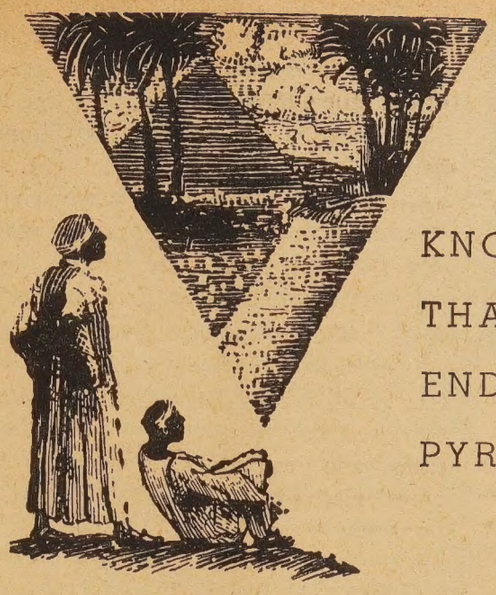
"The car ran between Decatur, Ill., and New Orleans and all the branches, covering about 600 miles of track," he recalls. "It was a ten-day trip. Besides the paymaster and his assistant, the crew consisted of engineer, fireman, conductor, flagman, and a cook. They all ate and slept in the car. Back in the 1890's the car carried three armed railroad policemen to protect it from the lone outlaw Rube Burrows. Before he was killed, Rube robbed six or seven L&N trains in the swamps between Montgomery and Mobile, but not the pay car.

"Pay day was a sort of holiday. Nobody worked if he could get off. The men looked forward not only to receiving wages but also to meeting old friends, many of whom they saw only at the pay car, some coming from long distances. Maybe you'd have to miss a day's work to be on hand when the car showed up. But it was a day of rejoicing in railroad families—a new pair of shoes for Abner, a dress for Sally, food for all.

"Our paymaster, Mr. Cogbill, allowed state and city tax collectors to sit in the car and tap railroaders on the spot. Sometimes the car stopped to pay only one man."

"Main-line crews on the Grand Trunk were not allowed to flag the pay car between stations," recalls a retired Canadian National hogger, William J. Parry, Rte. 1, Belle River, Ont., Canada, "so if your train passed the band wagon between stations you were out of luck. That happened to me more than once. Since we were paid monthly, I had a long and rather painful wait for the pay car to come again. I shed no tears when the car was discontinued."

"We never knew when the Espee money wagon would come around until



KNOWLEDGE
THAT HAS
ENDURED WITH THE
PYRAMIDS

A SECRET METHOD FOR THE MASTERY OF LIFE

WHENCE came the knowledge that built the Pyramids and the mighty Temples of the Pharaohs? Civilization began in the Nile Valley centuries ago. Where did its first builders acquire their astounding wisdom that started man on his upward climb? Beginning with naught they overcame nature's forces and gave the world its first sciences and arts. Did their knowledge come from a race now submerged beneath the sea, or were they touched with Infinite inspiration? From what concealed source came the wisdom that produced such characters as Amenhotep IV, Leonardo da Vinci, Isaac Newton, and a host of others?

Today it is known that they discovered and learned to interpret certain *Secret Methods* for the development of their inner power of mind. They learned to command the inner forces within their own beings, and to master life. This secret art of living has been preserved and handed down throughout the ages. Today it is extended to those who dare to use its profound principles to meet and solve the problems of life in these complex times.

This Sealed Book — FREE

Has life brought you that personal satisfaction, the sense of achievement and happiness that you desire? If not, it is your duty to yourself to learn about this rational method of applying natural laws for the mastery of life. To the thoughtful person it is obvious that everyone cannot be entrusted with an intimate knowledge of the mysteries of life, for everyone is not capable of properly using it. But if you are one of those possessed of a true desire to forge ahead and wish to make use of the subtle influences of life, the Rosicrucians (not a religious organization) will send you a Sealed Book of explanation without obligation. This Sealed Book tells how you, in the privacy of your own home, without interference with your personal affairs or manner of living, may receive these secret teachings. Not weird or strange practices, but a rational application of the basic laws of life. Use the coupon, and obtain your complimentary copy.

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Amazing new medicated lotion developed by a doctor works wonders by clearing up complexion in one week or less!

DON'T let a bad complexion ruin romance, spoil your fun, cause you to be embarrassed, shy or ashamed. If you suffer from acne, the common external cause of pimples among young people, try this wonderfully effective medicated lotion that was developed by a practicing physician to clear up his own daughter's complexion after other methods had failed. It has produced astonishing results for many thousands of others. It is GUARANTEED to help you or it won't cost you a single cent!

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Keraplex is a skin-colored lotion (NOT a greasy salve or ointment!) that is quickly absorbed by the skin and gets right down in the pores where its healing and antiseptic ingredients can go to work. After you have applied it, there is no trace left on the surface. In fact, it makes a perfect powder base . . . actually improves the tone of the skin! It is pleasant and easy to use — leaving your skin soft, clean and fragrant.

BEFORE

This young men suffered from a severe case of acne for years and tried all the usual "remedies" without success.

AFTER

Same young man after using KERAPLEX twice a day for just one week. Notice the decided improvement—pimples completely gone!

NO COST Unless It *ACTUALLY* DOES Clear Up Your Skin!

An analysis of results, taken from the "case history" records, indicates that Keraplex is successful in clearing up six out of seven cases of externally caused pimples.

What Users Say:

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"I have been completely satisfied with your lotion to help clear up the pimples on my face."—K. W.

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And men — if you suffer from pimples on shoulders and back, KERAPLEX does an amazingly effective job of clearing them up FAST — without soiling clothes, without messiness or greasiness!

Mail the convenient coupon below now, for a bottle of Keraplex. Then use it as directed for a full week. If you don't SEE results that delight you within that time, simply return empty bottle and your money will be refunded at once. Don't delay a single minute. Clip and mail the coupon NOW. Underwood Laboratories, Inc., Stratford, Conn.

— MONEY-BACK GUARANTEE —

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STRATFORD, CONN.

Yes! I want to try Keraplex ON APPROVAL. Send size checked below in plain wrapper marked "personal." When it is delivered I will deposit with postman amount indicated below, plus postage. If not delighted with the RESULTS, I will return empty bottle within seven days for a full refund of the purchase price.

☐ Regular Size, $1.98
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☐ SAVE POSTAGE. Check here if you ENCLOSE payment, in which case we pay postage. Same money-back Guarantee applies!

Payment must be sent with all orders to be shipped to A.P.O.'s, Canada and foreign countries.

we saw a notice posted," writes Dave Joslyn, 2164 Castro Way, Sacramento 18, Calif. "However, it invariably paid us in time for Christmas. We had about 3,500 men in the Sacramento shops where I worked.

"A Salvation Army lassie would wait hopefully for donations beside the rear steps from which we left the pay car with our wages. Bill collectors and railroaders' wives also were there. Maybe it was just as well that they did, for on our way home from the shops we passed saloons, gambling joints, and Chinese lotteries."

A retired Big Four telegrapher, Fred H. Grassley, 532 North F St., Lake Worth, Fla., was impressed by the part of our pay-car feature that referred to carrying "ghosts" on the payroll. "I remember," he says, "when the band wagon caught an old foreman with a padded payroll and forced him to return all the wages collected illegally."

Our apology to the Santa Fe. Pay-car photo on page 23 of our February issue has a garbled caption. It does not show the Union Pacific band wagon that a gang tried to rob but is really a Santa Fe photo of a Santa Fe pay car. Rest of caption is right.

Now listen to H. R. Clapham, a Wabash pensioner, 32100 11 Mile Rd., Farmington, Mich.: "I remember the Grand Trunk pay car well, for I used to brake on that road. Photo on page 12, February issue, does *not* show Glenco depot, but *may* show a depot on the Loop Line east of St. Thomas, I don't know. It must have been taken before 1910, because at that time Grand Trunk depots had their names in front under the order board. Besides, in 1908 the Class 500 engines were renumbered 2100 or 2300 and the big headlights changed to small ones." •

TWO-FOOT-GAGE engine No. 6 from Maine's abandoned Sandy River Line is being preserved by Frank Ramsdell in a shed on his farm at West Thompson, Conn., where you'll also find a boxcar and a flatcar from the two-foot-gage Wiscasset, Waterville & Farmington, reports Roger Breslow, 89 Dexterdale Rd., Providence 6, R. I. •

A CIRCUS ran into trouble when it pulled into Red Lodge, Mont., one summer day long ago. Jim Bullard, 201 S. Locust, Eldon, Mo., was braking on a Northern Pacific work train at that time.

"While the railroad crew from the circus train were getting their rest," Jim recalls, "we switched the cars and got them lined up for the trip back to Billings. The local sheriff with three deputies told our conductor, Dick Potter, that the train would be held up until each man in the circus paid his poll tax. 'Don't let it leave,' he said, 'until I give the word.'

"Well, the circus manager raved: 'The Montana poll tax is just plain robbery! We're not paying it. I have 60 or 70 laborers who put up and take down the tents, among other jobs, and they get very little for this work except their meals and the joy of traveling with a circus.'

"But after a while he simmered down and let the law collect $4 per man from his payroll. When that outfit left town after the night show, the circus people cussed the sheriff, Red Lodge, and the State of Montana. At that time I thought it was funny. Later on, though, it wasn't. I found a pink slip in my pay envelope saying that the NP had deducted some of my hard-earned money for the damned poll tax."

While preparing our article, "100 Years of Circus Trains," we asked Dave Joslyn, a retired Southern Pacific official photographer, for pictures. Said he: "Is my face red! To think of all the times I watched the circus come to town, and the unloading, and of the many buckets of water I toted for thirsty elephants just to get a free seat way up in back with a tent pole between me and the main ring, but never once did I think of taking circus pictures."

"Speaking of circuses," Bill Cadmus, retired boomer, 2355 Austin Highway, San Antonio, Tex., writes: "while switching for the Santa Fe at Las Vegas, N.M., in 1908, I found $46, in a rubber band, on the spot where a circus had loaded and left town. I think it was a grifter's roll that a horse or an elephant had stepped on. Anyhow, I kept it."

Circus fans who do not belong to any club in that field should get in touch with the Circus Modelers and Owners Association, or the National Circus Fans, or the Circus Historical Society. All three publish news bulletins pertaining to the hobby and welcome new members.

The CM&OA has approximately 700 members. Its publicity director is Maurice Allaire, 24 Vermont Ave., Portland, Me. •

15 GAS-TURBINE-ELECTRIC locomotives of 8500 horsepower each are being built by General Electric at Erie, Pa., for the Union Pacific,

and as we go to press the UP is ordering 30 more of the same. Total cost of the 45 is $38,000,000.

These monsters, we are told, will be the mightiest internally-powered units ever seen. The UP already has in service a fleet of 25 gas-turbine-electrics, 4500 hp. each, all GE. The new types will be built in two sections (permanently coupled together), with an enginemen's cab at one end and a fuel tender coupled behind.

Geared for freight service, they will have a top speed of 65 miles per hour. Weight, 408 tons on 12 axles. Over-all length, with tender, 165 feet, 8½ inches. Height, 16 feet, 2 inches.

Says Arthur E. Stoddard, the road's president: "Union Pacific hauls freight faster than any other railroad in the world. Last August we set a new record, 96.9 miles per car per day—which is an average for all UP freight cars, whether moving in trains or standing while being loaded or unloaded—and the new locomotives will enable us to do an even better job."

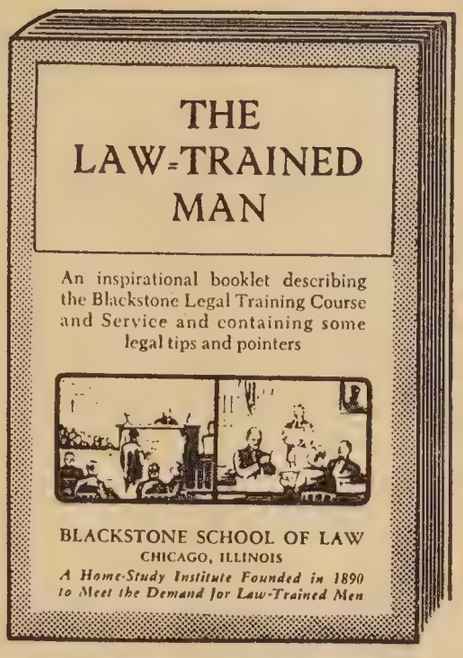
A gas-turbine power-plant is similar to that of a jet engine, except that there is no jet "thrust" for propulsion as in a plane. In a locomotive the turbine is connected through reduction gears to electric generators which supply power to driving motors on axles.

Gas-turbine-electric locomotives pack a large amount of power in a comparatively small space, require no water, have fewer moving parts than other types of similar hp., and fuel with low-cost, treated, bunker C oil.

The world's first gas-turbine-powered locomotive was built in Switzerland by Brown-Boverd & Co., Ltd., for the Swiss Federal Railways and put into service in 1941. •

A RARE RELIC of Britain's early railways, a length of U-shaped rail, has been given to the Canadian Pacific and is now on permanent display in the fourth-floor library at Windsor Station, Montreal. It was cast in the period between 1767 and 1780 by Coalbrookdale Co. at Wellingston, Shropshire, England.

"The first metal rails, cast-iron, were produced at the Coalbrookdale foundry in 1767," comments J. E. Armstrong, CPR engineer of track, "in five-foot lengths, four inches wide, a quarter-inch thick. In 1789 a plain rail upon which flanged wheels could run was introduced by William Jessop. To increase its stability the base had flanges on both sides for spiking to the ties." •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Frankly, "The Law-Trained Man" was written by us for the sole purpose of arousing interest in the internationally famous Blackstone home-study law course. Among training courses, law is the *aristocrat*. The demand for men trained in the law grows constantly. Since 1890 the Blackstone home-study law course has been meeting and satisfying this demand. Today the School can point to more than 60,000 substantial, professional men and women who have received financial, personal or business benefits from Blackstone training.

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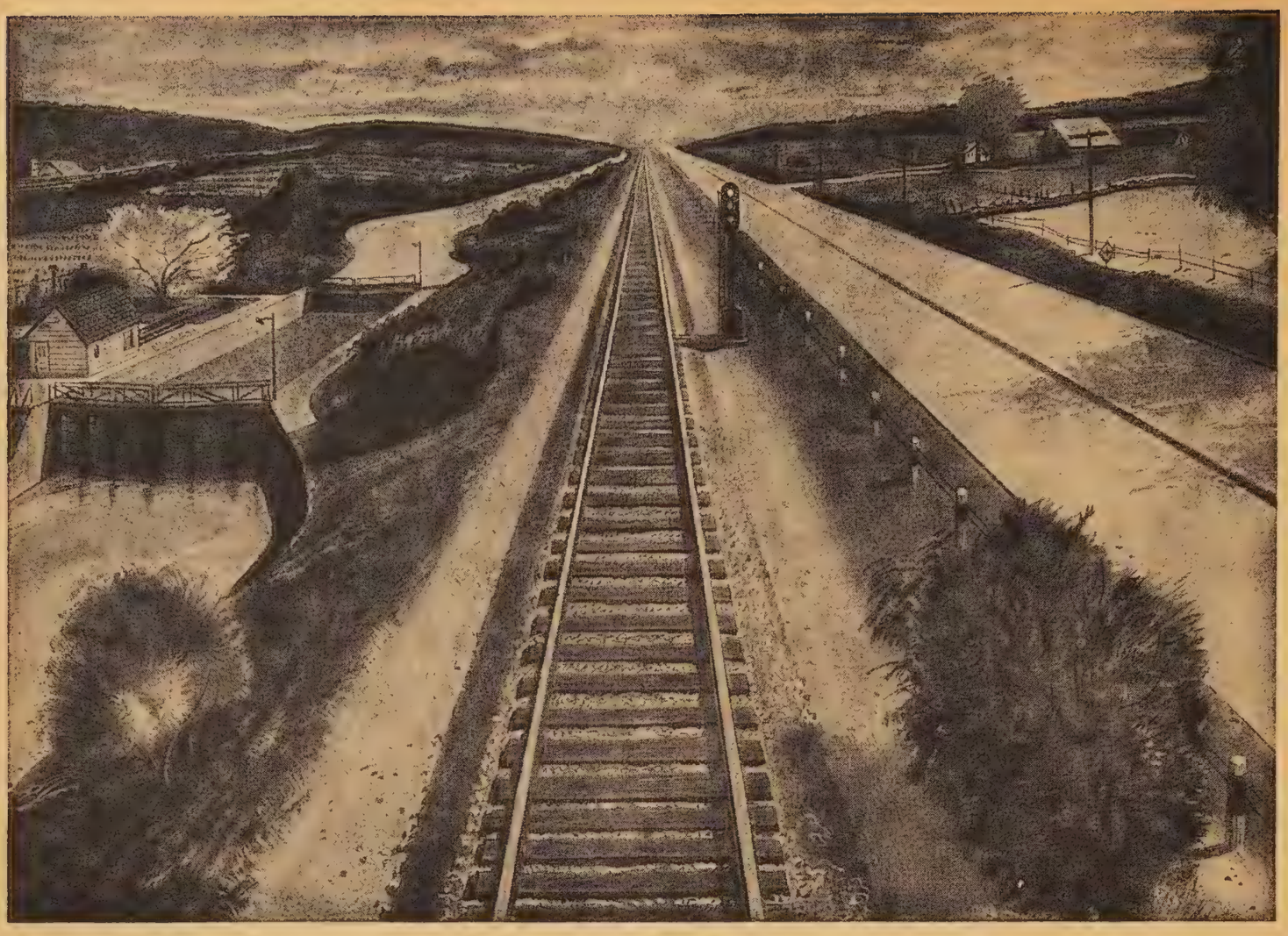


How competitive pricing in transportation would help you

In most American businesses, the benefits of greater efficiency can be passed on promptly to the public. In the transportation business, however, this is not always the case.

Consider what has happened on the railroads:

In the last 30 years the speed of the average freight train has gone up more than 50 per cent; the load has nearly doubled and the hourly output of transportation has increased nearly three times.

To make possible these and other gains in efficiency, the railroads have spent, since the end of World War II, nearly $11,000,000,000 — every dollar of which was financed by the railroads themselves.

But — as is shown in the report of a special Cabinet Committee appointed by the President — government regulation frequently denies to the public the benefit of the lower costs of the most economical form of transportation, so as to protect the traffic and revenues of carriers with higher costs. The result, as the Cabinet Committee says, is that shippers and, ultimately, the consuming public must pay more for freight transportation than would otherwise be necessary.

What can be done to correct this unhealthy situation?

The special Cabinet Committee recommended that railroads and other forms of regulated transportation be given greater freedom to base their prices on their own natural advantages. At the same time, government regulation would continue to prevent charges which are unreasonably high or unreasonably low, or are unduly discriminatory.

This would make it possible to pass on the benefits of the most efficient operations to shippers, producers and retailers, and to the consuming public which in the end pays all transportation costs.

Bills based on Cabinet Committee recommendations have been introduced in Congress. For full information about this vital subject, write for the booklet, "WHY NOT LET COMPETITION WORK?"

Association of American Railroads

742A Transportation Building • Washington 6, D. C.

HARRY BEDWELL'S death last October saddened millions of his readers. This tribute to him comes from Charles D. Dulin, railroad telegrapher, Kansas City, Kan.: "I watched him sign the transfer; then I reached over and lowered the wick. When I turned around he was gone. There was no sound at the waiting-room door, no crunching of cinders on the platform. A sounder flipped open, snapped down again with an air of finality.

"The old brass lamp whispered a requiem of steam and Morse and red plush seats. I sat down in the insulated chair and gazed at the bay window pane. Guess I've outgrown my lenses, or is the pane moist? Reckon my eyes are not so good, because these train orders blur, too.

The bay is silent; not a click
Intrudes upon my somber mood
As I begin the graveyard trick
In sorrow's realm of solitude.
Although the Morse will weave its themes
In singing brass, the veteran hand
Will always be, in pleasant dreams,
That booming brother, Eddie Sand.

"I've always had a warm spot in my heart for fellow telegraphers, and when the king of them all pulls out, suddenly I feel stranded."

Trains editor David Morgan comments: "Add my name to the long list of those who mourn the passing of Harry Bedwell. He was as capable a practitioner in the art of good railroad writing as lived in our times. Just the other evening I picked up his book, *The Boomer,* and again was intrigued by his ability to build a rising tide of tension and drama." •

NEWS BRIEFS. Chesapeake & Ohio begins operating its freight trains through New York Central tunnel under Detroit River between Detroit, Mich., and Windsor, Ont., Canada, and discontinues its carferry service between those points.

In a freak accident a Norfolk & Western train cuts in two a wheelbarrow being pushed by John Murphy on a Suffolk, Va., grade crossing, but he is barely scratched.

Retired railroader Henry Weitzel buys a caboose of 1871 vintage, installs it in his back yard at Seward, Neb., and turns it into a cottage, reports Robert J. Brubin, Rte. 3, Ada, Okla.

Wabash employe J. D. Jaqua acquires the Wabash station at Holloway, Mich., built in 1882, moves it to his own lot, and is converting it into a home for himself and family.

Bob Johnson (The Ferroequinologist)
McCloud River Railroad's No. 25, with a great smoke plume, wheels 14-car Gold Spike Special in California.

A smart Collie named Rusty, belonging to Henry Whitney, Long Island signal operator, waits for a certain LIRR train to pass her Locust Valley home every evening but Sunday, then she sticks her head out of a second-story window and catches the neatly-folded newspaper which a trainman tosses to her. "She never misses," says Whitney.

A strange request comes to the Utah Road Commission from Reid Bench of Orem, Utah. He wants to grow mushrooms in a tunnel at Thistle which was built for the proposed Utah Railway line but never used, reports C. T. Steeb, 240 W. S. Temple St., Salt Lake City.

The Reading reconditions six steam engines for emergency use on its Shamokin Division out of Gordon enginehouse.

Mrs. Frances M. Ford, age 101, of 4720 Woodland Ave., Drexel Hill, Pa., is adjudged the author of that childhood classic, *The Little Engine That Could,* written in 1912 under a pen name, "Uncle Mat," and gets royalties.

Rock Island, cutting its operations at Okarchee, Okla., does so literally. It slices the old frame railroad station there into three parts, removes the two ends, and leaves the rest for station agent-telegrapher Joe Owens.

Chesapeake & Ohio merges with its wholly-owned subsidiaries, the 26-mile Manistee & Northeastern and the 8-mile Flint Belt, in order to simplify its corporate structure and cut costs.

R. Hervey Angier, Southern Pacific hogger, 143 Roselawn Pl., Los Angeles, Calif., makes a hobby of collecting railroad timetables, of which he has more than 1000. "My pet," says he, "is one the SP issued in 1875."

Barre & Chelsea, a famous 38-mile freight road in Vermont, is being abandoned, laments Elwin K. Heath.

Missouri Pacific Lines is building a 9.5-mile extension of its Hashville (Ark.) Subdivision to connect with an extension of the DeQueen & Eastern near Dierks, Ark., in order to provide a new through route for pulpwood and wood chips.

Norfolk & Western rescues an expectant mother, Mrs. W. B. Catron, stranded by flood at Leckieville, Ky., and takes her by rail-motor car to a Williamson, W. Va., hospital, where baby is born.

New railroad construction activity for this year is estimated by the Commerce and Labor departments at Washington, D.C., at $400 million, compared with the $340 million total last year. •

UNUSUAL train order was received by Engineer Bulgrin on May 28, 1953, when he was handling Duluth, Missable & Iron Range No. 1329. Initialed by EWC, Supt.; issued by AJA, dispr., and copied by Holbrook, opr., it was sent to us by the engineer's son, Burdell Bulgrin, Box 206, Owen, Wis.

To C & E Eng 1329 at Mitchell. Eng 1329 run extra Mitchell to Godfrey and return to Mitchell. Eng GN 3201 run extra Mitchell to Albany and return to Mitchell. Two 2 extras 1329 and GN 3201 south have right over two 2 extras 1329 and GN 3201 north Albany to Mitchell and wait at Albany until six naught one 601 pm for two 2 extras 1329 and GN 3201 north. This order is annulled at eight ten 910 pm. •

(Continued on page 56)

"Here come the elephants!" Spectators watch the unloading of the Ringling Brothers and Barnum & Bailey Combined Shows

100 YEARS OF

The Railroads Play a Major Role in the Glittering Drama That Is Enacted under

by FREEMAN H. HUBBARD

AT MIDNIGHT on a long-gone Sunday, years before the Ringlings merged with Barnum & Bailey, the five brothers closed a Chicago run, finished loading their personnel, animals, and equipment on a train of three sections, thirty cars each, and headed for Clarksburg in the rugged mountains of West Virginia. The year was 1913.

Circus trains move slowly. They have to, with a herd of elephants on board. At least one big wreck was caused by elephants shifting their weight in a tall-sided car rounding a curve. And so, for forty-one hours, the Ringlings' caravan rolled eastward on Baltimore & Ohio rails through Indiana and northern Ohio, down through the flood districts of the Buckeye State, and finally across the muddy Ohio River into Parkersburg, W. Va.

There it halted. A series of tunnels checked southern progress. The circus trainmaster cast a nervous eye on the huge cars which held the elephants and glanced toward the giraffes, and then consulted the station agent.

"Get me the measurements of all the tunnels we have to go through," he said.

The agent wired the division super's office. Back came the answer, "Smallest inside dimension eight by eleven feet."

Well, that did it. The elephant cars from roof to rail-tops measured twelve and a half feet. Obviously, the road was blocked.

"Can't we get to Clarksburg with-

Canadian National Railways

on Canadian National rails. Many a boy earns a pass into the big top by lugging buckets of water for thirsty pachyderms.

CIRCUS TRAINS

Acres of White Canvas Each Year from Early Spring till Some Time in October

out using the tunnels?" the circus man asked.

The agent grinned feebly. "You could detour 150 miles, maybe 175."

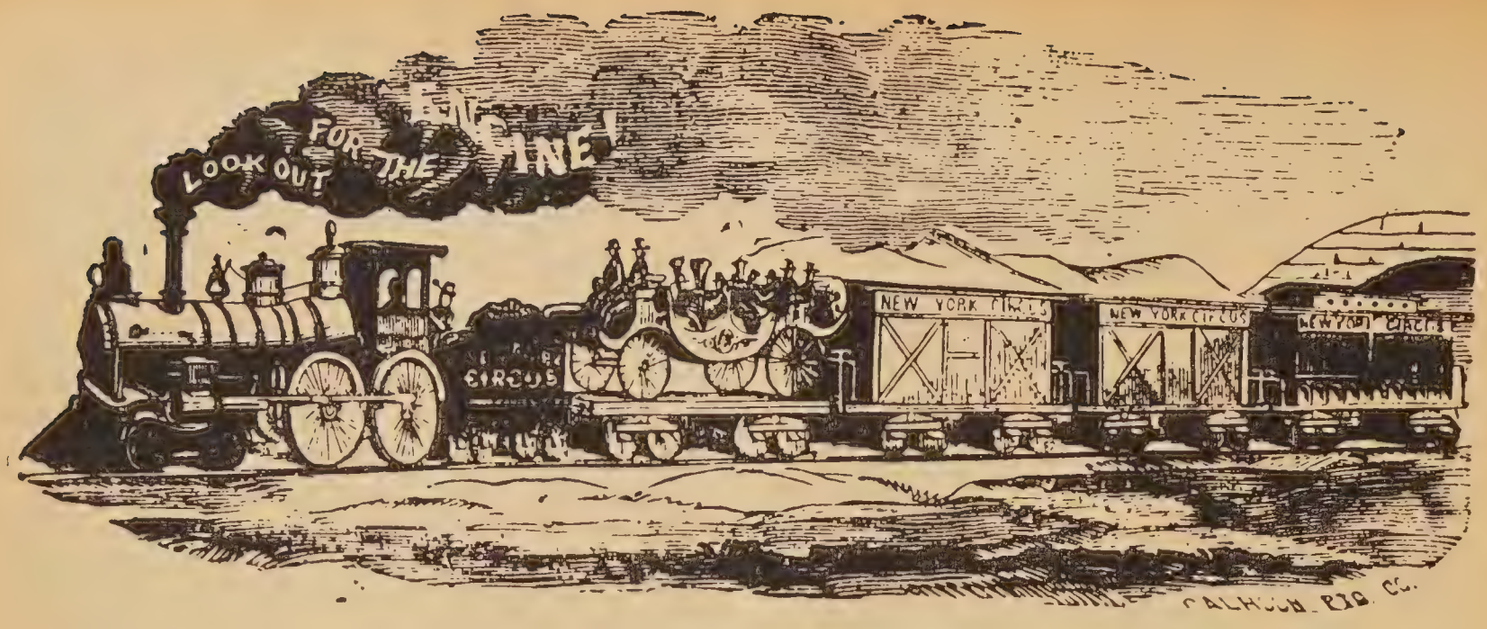
That would mean five or six hours delay, not to mention $800 to $1,000 in extra transportation cost. However, most of the cars could use the tunnels, so only the larger ones were cut off and routed over the detour.

It was then nine p.m. But the night's headaches were not ended yet. That longer route for the big animals had numerous sharp curves and grades. The heavy circus cars were reinforced by chains to girdle them to the track in case of accident. This interfered seriously with their balance on sudden curves, so they had to come off. That killed another hour.

Today, such a delay would not occur. In the first place, the railroads have since daylighted or enlarged many tunnels and built cutoffs to ease the grades and curves. And the shows have learned so much from a century of traveling by rail that they now check on details like clearances months before they load up, even more so than they did several decades ago.

PRIOR to 1856 all circuses were small one-ring affairs that moved by wagons over dirt roads. They often bogged down in thick mud and at times found that a bridge they were supposed to cross had been burned by some rival show. William C. Coup, a tavern-keeper's son who ran away from his Indiana home to join a wagon show, commented:

"It was bad enough to have slept



From newspaper adv. of 1866

New York Circus, touring the Empire State in 1866, was the first circus to make a really successful rail trip.

only four hours out of the twenty-four, and to be crawling along at a snail's pace. Then it starts to rain. Finding the road has been blocked is the last straw. It means retracing the way back to the fork of a road, maybe miles in the rear."

The first pioneer in transporting a circus by rail was Dr. Gilbert A. Spaulding, a New Albany, Ind., druggist and part owner of the Spaulding & Rogers show. After operating a circus boat, *The Floating Palace,* up and down the Ohio and Missouri rivers, Dr. Spaulding made a bold decision. He rented some railway cars, loaded his entire show on them, and set off on a new adventure.

Canadian National Railways

"Big cats" are rail hazard. Some have escaped from wrecked trains and terrorized the countryside. If one breaks loose on a circus lot, standard practice is to set his empty cage in a corner and have elephants drive him back into it.

There were no Pullmans in those days, 1856, nor standard-gage tracks. The show people, inventive souls, took planks into the coaches, laid them across the seats, and slept on them. Their slumber was broken two or three times a night. Usually when the train reached a junction point the gage changed and they had to unload the circus and load it onto the cars of another railroad. Which was rather exhausting, to say the least.

The tour proved to be a nightmare, but it made history. Ten years later another daring showman, L. B. Lentz, planned a railroad route for his New York Circus that would avoid frequent changes of gage. He advertised this venture as the "First summer tour per railway to a few of the principal cities and towns in the State of New York," and in 1867 his ads boasted of the "Second triumphal tour by rail."

The ice having been broken, other shows took to the iron trail. The first circus to travel by rail to California was the great W. W. Cole show, in 1873, around which time John H. Murray's Railroad Circus astounded New England and Canada's maritime provinces. It was not until 1887 that a railroad show, Howe's London Circus, toured Mexico. The longest circus rail jump on record, 2,200 miles from Halifax to Winnipeg, was made by W. H. Harris' Nickel Plate Circus.

Meanwhile, William Coup had become assistant manager of the Yankee Robinson show, one of the first circuses to travel aboard canal boats. Coup was so much impressed by the possibilities of a railroad circus that in 1870 he wrote to P. T. Barnum, who was then living in semi-retirement at Bridgeport, Conn., asking him to put together "a great traveling attraction."

Barnum demurred, but at length said yes and hired Coup as manager of the new enterprise. Their circus opened in Brooklyn, N. Y., on April 10, 1871. The next year it took to rails. Until then the Barnum show had been hauled from place to place by teams of 600 horses, but P. T. agreed with Coup that moving by "steam cars" could be more profitable because it would skip the small towns.

After being turned down by several railroads on the plea that they couldn't furnish switching room for a circus train, Coup induced the Pennsylvania to cooperate and he picked New Brunswick, N. J., as the first loading place and Trenton as the first stopover for the new train. The circus rolled out of New Brunswick in a long line of brightly painted cars.

"The only mishap we had on that trip," Coup reported, "was a camel slipping off a runway and breaking its back."

"But," he added, "you can't pos-

sibly imagine the amount of labor involved. I never took the clothes off my back from the time of first loading until we reached Philadelphia, our seventh stop! During all that time I was actually teaching the men the art of loading and unloading."

The ingenious Coup devised a system of his own for safely and quickly loading and unloading the ten-ton wagons, elephants, camels, and horses. This consisted of sheet-iron plates between connected flatcars, inclined runways, snubbers and hook-ropes, and stock-car gangplanks, a system which is still in use today. Regarding that first rail tour, he wrote:

"At Frederick, Md., in order to load we had to remove all the brakes, and this the yardmaster refused to do. I showed him my contract, wherein the Pennsylvania Railroad had agreed to remove all brakes, but he still refused, so finally I resorted to strategy.

"I invited him to a restaurant, and while we were absent, by a prearranged movement, my boss canvasman wrenched the brakes off; and by the time the yardmaster and I returned the train was almost loaded. Of course, I pretended to be very angry at such conduct, but our point was gained. As the brakes were easily replaced, we made the next stop all right."

Mr. Coup moved this circus in 61 cars rented from the Pennsy, but this equipment was unsuitable, so he ordered longer cars of standard height from carbuilders, and these were built within a few months.

Said he: "We had Pullman cars for the artists, sleeping cars for the laborers, boxcars for the entire staff, palace cars for the horses and other large animals, and platform cars for wagons, chariots, cages, and carriages. This was the first railroad show put together with its own cars."

Barnum usually refused to travel on the same train with Coup because, as he put it, "If we both get killed the show will be without a head." Years later, after their train had run away on a down grade between Indiana, Pa., and Blairstown, Pa., Coup had all their cars equipped with airbrakes.

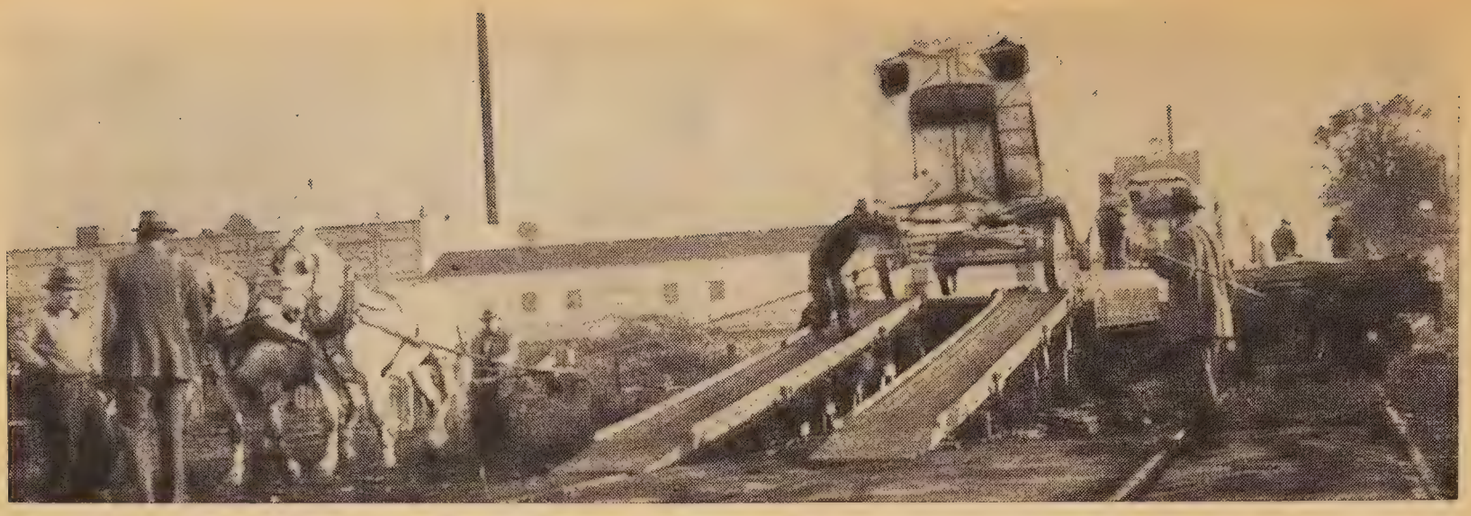
Meanwhile, Coup had organized half-rate Circus Day railroad excursions, which brought thousands of people to the show grounds from towns beyond the normal reach of horse and buggy. Wherever the big top went with its streaming Barnum banners, curious men, women, and children flocked to see the spectacular train. And whereas, in the past, much time had been lost in traveling, all moves were now made at night, with long jumps from one big population center to another.

The new ideas paid off, thanks to Coup and the railroads, and created the first three-ring circus, with a famous slogan, "The Greatest Show on Earth."

BARNUM'S biggest rival, Ringling Brothers, did not take to the rails until 1890. The following season they expanded to a three-ring show

New Haven Railroad

Long flatcars carry the circus wagons. William C. Coup devised efficient method for loading and unloading them.



Years ago, horses or elephants did the hard work of unloading heavy circus wagons from the long flatcars, with men guiding the gay red, blue, and gilt-trimmed wagons down the ramp. Today, however, tractors are used. The Clyde Beatty outfit, shown below, is one of America's only two circuses that still own railroad cars. Beatty first rode to fame as a wild-animal trainer.

Paul Darrell

and a Roman pageant, with 130 horses and a twenty-car train. In 1903 they bought the Barnum & Bailey Circus, but operated the two shows separately. In the summer of 1918 America's railroads served notice that they could not continue to handle two big circuses during wartime. That forced a decision whereby in 1919 the two shows were merged. At first the combined shows had a hundred cars on their train, but in time they cut the number to ninety.

Apart from Ringling-B&B, the Clyde Beatty outfit is the only North American circus that has owned railroad cars since the collapse of two famous shows, Cole Brothers and Dailey Brothers. Beatty won renown as a wild-animal trainer. He went into business for himself in 1946 by purchasing the Russell Brothers Circus. The latter had been a motorized company but, in 1945, had "gone railroad" by buying fifteen cars from a defunct carnival.

The Beatty show has winter quarters at Deming, N. M. During its first season, it moved on two seventy-foot stock cars, seven flats (mostly 72-footers built by Warren), and six coaches. (Circus people usually refer to their passenger cars as *coaches*, even though they are equipped with permanently placed berths.) Those fifteen cars could not hold all of Beatty's personnel and property, so he had to carry his side-show and concession equipment by trucks on the highways. In 1947 he tightened up on the train space by replacing one of his private cars with an additional flatcar.

The following year he rebuilt his show, buying new and larger wagons, and dropped another private car so as to get an extra flat to carry those wagons. You see, railroad rates for transporting circuses are based upon multiples of five. If you want to move seventeen cars, for example, you pay the same price you would pay for hauling twenty cars. Maybe it doesn't make sense, but that's the situation that exists.

Even today Beatty limits his circus to fifteen railroad cars plus several trucks, although he is under constant pressure to enlarge it. He does not feel that the use of twenty cars would justify the big increase in freight charges.

One of his four coaches is used by performers, another by ushers, bandsmen, concessionaries, and ticket takers, and the third by tent and seat men, the train crew, and animal handlers. The fourth is reserved for show executives, with the Beatty family occupying half of it while on the road.

BECAUSE interstate laws restrict passenger trains to twenty cars, most circus sections are handled as freight. The Ringling Brothers and Barnum & Bailey Combined Shows use exactly eighty cars, twenty-three of which are "home, sweet home" for the circus personnel. Each employe, aside from the executives and a few stars, has a bunk 74 by 44 inches, with a locker at its foot, in the reconditioned Government-surplus hospital cars.

Midway in the train is a glamour car—for girls only. It has thirty-eight berths and a large padlocked closet in which each person is given space for one *basic* dress; basic, in this case

meaning street clothing. The ladies who use this car are mostly show girls, minor aerialists or equestriennes, and the like. It's a no-man's land.

Old-timers who are not close-mouthed will tell you of the days when occasionally a man would sneak into a women's car. There's a legend that around the turn of the century a seventeen-year-old bareback rider, Marie Dupre, slim and very saucy entertained so many men on the Dale & Dale Circus train that she was known as a "love cheat." The circus men's wives hated her.

This went on for some time. Then, one night, while the train was running through Illinois, we are told, two shots rang out in the darkness and the irrepressible Marie was found dead in her berth. Beside her body lay a handsome mustachioed animal trainer, fatally wounded. The case seems to have been quite a mystery. It was not cleared up until years later, according to reports, when a dying man who had left the circus to join a carnival confessed to the murder, motivated by jealousy. We are trying to run down the details on this case for future publication.

No scandal that we know of attaches to a modern glamour car. What happened on the D&D train, if true, was long, long ago. The Ringling-B&B car is chaperoned by a maid. Its occupants are girls of good reputation. Adorning the bunks are gay pillows and matching bed covers, with cretonnes, chintzes, and pictures on the walls. Clocks tick merrily on tiny shelves. Here and there a family photograph, a flower on a window sill. Home on the rails.

Like the other personnel cars, this one has always a double row of berths. It is never made into seats for daytime travel, because circus trains run almost exclusively during the night.

Each morning, after the car is vacated for the day, the maid sweeps and dusts the cubby-holes in which the gals sleep, two in a bed. The car is kept clean and dainty. Instead of the customary Pullman-green curtains, it flaunts brightly colored drapes, usually made by the girls themselves.

Some of these girls are ballet dancers or musical-comedy hoofers who sign up with the circus when there are no openings in their own fields. After all, the circus is show business. Maybe next year they'll get a better break. Since they live in a railroad car for the entire season, and the car has neither a tub nor a shower you may wonder about those exquisite beings in brief sparkling skirts or pale tights with iridescent bodices—how do they manage to keep clean?

"Ah," said one of them, "that is our secret. But if you must know, we bathe out of water buckets in the women's dressing tent and we pour water on each other."

So that's how it is! Prior to 1919 the circus coaches were wooden, with poor ventilation and with dim lighting in the toilets, "Ladies" and "Gents," at each end. Train space was so valuable that not even the solo performers in the center ring were given private compartments. Every inch counted.

A few circus owners, like James A. Bailey and the Ringlings, had private cars, while other top executives boasted staterooms. The rest of the circus personnel were crammed two in a bunk, in three tiers, and both sexes used the same dressing tent, with a strip of canvas separating the men from the women. There were, of course, separate cars for married couples and for single men and single women.

Then in 1919 the aerialist Lillian Leitzel demanded and received from Ringling Brothers an entire Pullman for her own use—the first time in history that any performer was assigned a private car. Not only that, but Lillian received a luxurious private dressing tent on the circus lot. And, being a musician as well as a trapeze artist, she carried a piano in her private car. This combination of rare honors made her the envy of all other circus stars, not only those in the Ringling outfit but others as well.

In a way, Lillian was worth it. She was, perhaps, the greatest circus star of all time. Darling of the canvas world, she was audacious, dainty, and quite temperamental, four feet ten in height and weighing only 94 pounds. High up in the big top she would turn her lithe body around and around, over her arm, often as many as seventy-five times in a single performance. It was a feat of endurance as well as grace and skill.

Once she remarked gaily, "I will live forever because neither the Lord

Railroad rates for hauling circus trains are based upon multiples of five. For example, it costs you as much to move 17 cars as 20. For that reason equipment is built very long. Warren Tank Car Company built the 72-foot stock car shown here.

Culver Service

Lillian Leitzel, probably the greatest star the big top has ever known, was the first performer to be assigned an entire car on a circus train, as well as a private dressing tent on the lot. Both were rare honors. At that time, 1919, practically all circus employes slept two in a bunk; performers shared a common dressing tent. The Ringling Brothers' darling, Lillian was a dainty thing, 4 feet 10, weighing 94 pounds, and very temperamental. Also musical. Her private Pullman carried a piano.

nor the Devil will ever claim me." But on the evening of February 13, 1931, while she was doing her famous act high up in the Viennese Music Hall at Copenhagen, Denmark, the brass swivel on her rope snapped and, with no net to catch her fall, she plunged to death.

They buried her at Ingleside, Calif., and over her grave they erected a monument of white Parian marble, with the classic charm of ancient Greece. It represents the Angel of Death bearing aloft her small and beautiful naked body.

Her husband, Alfredo Cordona, also an aerialist, thereupon married a trapeze performer named Vera Bruce, no doubt thinking to find in her another Lillian Leitzel. But the union ended in tragedy. The frustrated Cordona shot and killed Vera and then himself. In accordance with his last wish, his body was laid to rest beside the ashes of his first love.

A YEAR AFTER Lillian Leitzel obtained her own space aboard the Ringlings' train, May Wirth, a famed equestrienne, persuaded the Ringlings to assign a Pullman apartment—living room, two bedrooms, kitchen, and bath—for herself and her family. Today the Ringling-B&B train boasts about forty private sleeping compartments as well as special dormitory cars for single women, one for single men, and one for married couples. Also separate quarters for employes below the rank of executives and stars—such as musicians, freaks, and roustabouts. The fat lady, the giant, and the midgets sleep in beds suitable for their size.

The total number of cars owned by a circus includes the advance advertising car, if there is one, which moves on the same railroad contract even though it may run two weeks ahead of the circus itself. But changes are shaping up. Last season, for the first time since the Barnum show took to the rails in 1872, it sidetracked its advance car and substituted trucks and station wagons for publicity and advertising use. And the Clyde Beatty outfit, the only other American circus which now owns railroad cars, has been using motorized advance equipment for its billposters for years.

The reasons for this trend are two-fold. Circuses have cut down on their outdoor advertising and thus haul fewer billposters. But from the railroading viewpoint, the other reason is more important. The cost of rail movement has climbed so high that Ringling-B&B, for instance, decided to use its eightieth car on the show itself rather than "waste" it on publicity.

However, there is some chance that the R-B&B advance car might some day be back in action. The circus owners' original order to convert it into a sleeper was rescinded and the car is now parked in the winter quarters at Sarasota, Fla., for possible future use on the old basis.

The season opens not in April, as you might think, but in a shivering January. It is then that the circus executives begin poring over maps, charts, and facts and figures on business trends, population, and regional disasters.

A season's tour may cover 20,000 miles or so. Its planning is more complicated, even, than graphing a railroad timetable and it takes weeks of sustained effort.

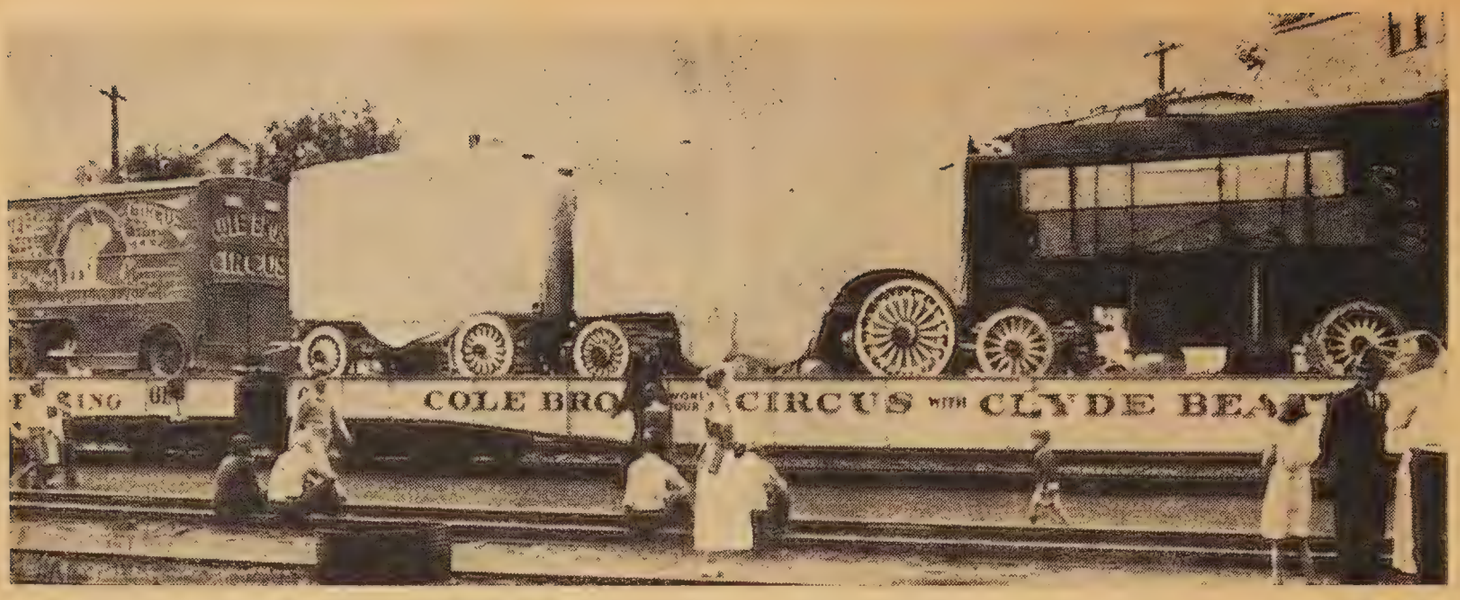
A circus general agent must be acquainted with railroad traffic managers and yardmasters. He must know about roadbed conditions, grades, mileages, yards, bridges and tunnels, distances between the big population centers, and railroad connections. He is the transportation boss, the real railroader of the show. The circus trainmaster, a lesser official, supervises loading and unloading.

In springtime, when the show train rumbles out of winter quarters, its itinerary is lined up for seven months. Of course, a sudden misfortune along the way may cause a change. A flood, for instance, or a wreck of the train itself. Hardship-ridden localities are skipped till later in the season or till the following year.

WHILE the route-makers are delving into financial, geographical, and railroad data, the big top's advertising department begins ordering its dazzling posters and cards for the coming season.

After the general agent has picked a city or town where the circus will

"I will live forever," Lillian Leitzel said gaily, "because neither the Lord nor the Devil will ever claim me." But one February night in 1931, while she was doing her spectacular act aloft in a Copenhagen music hall, the brass swivel on her rope snapped and, with no net beneath, the toast of two continents fell to death. She is sleeping out eternity at Ingleside, Calif. The monument over her grave, sculptured in Parian marble, shows Death's angel bearing upward her beautiful nude body.

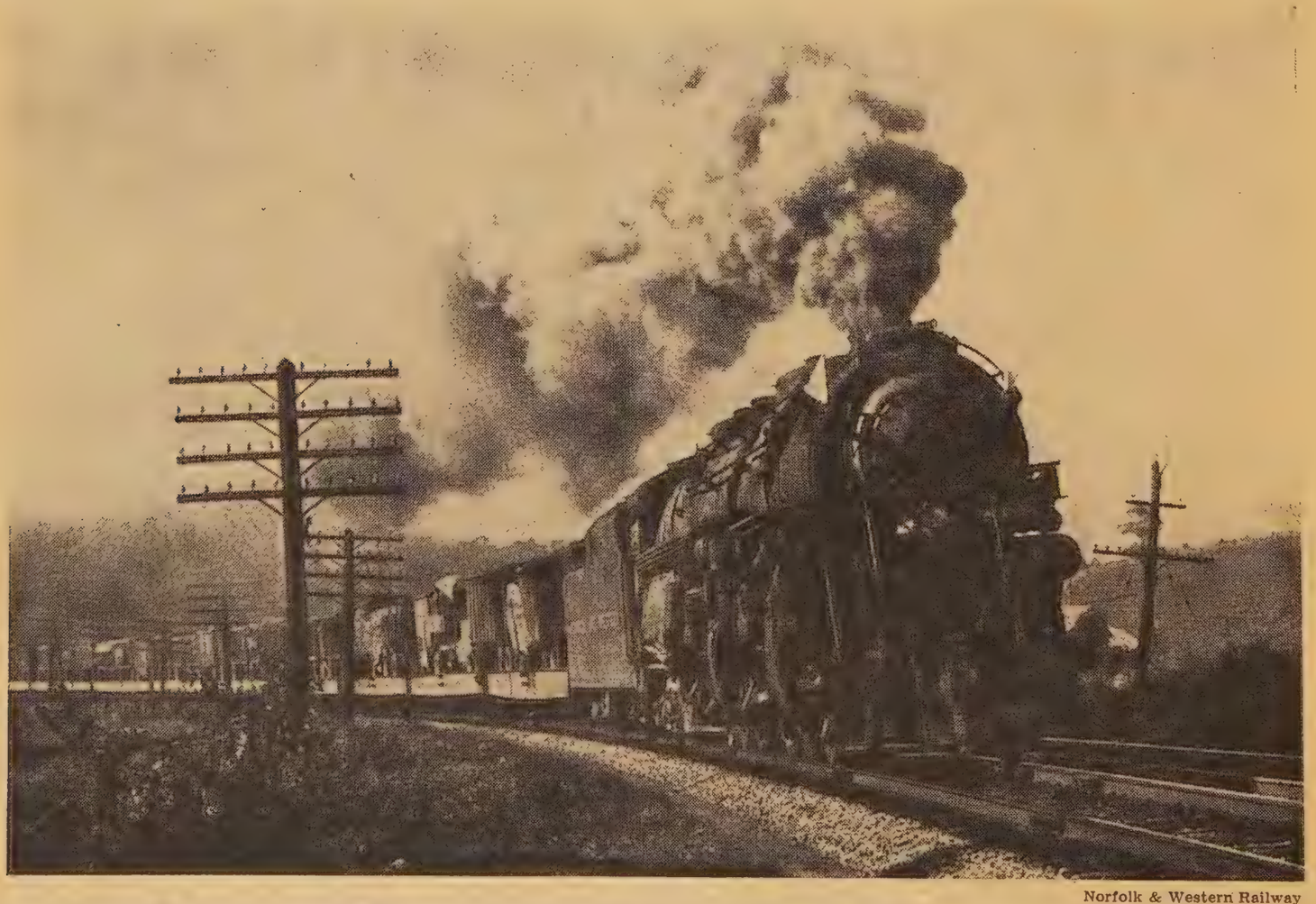


Before the famed animal trainer Clyde Beatty had his own railroad show he was associated with Cole Brothers.

play, he sends a contracting agent there to rent a lot and get a license for the performances, in addition to a parade permit. The assistant also signs a contract with a railroad company for that town and others along the route. This may be done months before the first advance railroad car—or the advertising trucks and station wagons—can hit the road.

The advance car was jammed to the ceiling with lurid billposters and window cards, photographs and press releases, paste pots, slap brushes and step-ladder, even a typewriter, and provided sleeping quarters for the staff. It stayed in each town the same length of time that, later on, the show itself would stay. As a rule, only one day. During that active day from eight to 100 flaming lithographs were posted in the town and its environs—but no barn was used without the owner's written consent. For large cities, a big circus would operate two advance cars.

The next representative of the saw-



Norfolk & Western Railway

Norfolk & Western engine 1202 proudly wheels the first section of Ringling-B&B through the hills of Virginia.

Western Pacific Railroad

Homeward bound on Western Pacific special after unforgettable day at Polack Brothers Circus under Shrine auspices.

dust trail to show up in the bill-plastered community is a "24-hour man," so termed because he appears the day before the big top. This busy individual checks on all contracts for rail transportation, food for the circus army, feed for the animals, water, sawdust, parade route, permit, and so on. He must know, for example, where to find enough dirt at an hour's notice to fill in a fifteen-acre lot in the event of a drenching rain. He may have to revamp a railroad crossing—and quickly—by laying planks between rails.

Years ago, the personnel often had to walk a mile or more from the cars to the lot in early morning. Sometimes, while the afternoon show was going on under the big top, switchmen would shunt the cars to different sidings. Then at night when the trapeze artists, clowns, animal handlers, and other circus folk returned to their cars they'd need a series of kerosene flares to guide them to the new location.

That era passed. Nowadays, it is common for a bus to shuttle between the railroad siding and the tented city.

Before the 24-hour man goes to bed he sets his Big Ben so as to be awakened when the first section of the glittering train pulls into town between four and five a.m. with the "cook house," horse tents, and acres of canvas.

One day the Atlantic Coast Line cut 24 hours off regular time for hauling the Ringling Brothers-Barnum & Bailey Combined Shows about 1300 miles from its winter quarters at Sarasota to New York for the grand opening. This surprise caught the publicity boys with their pants down, so to speak. The unpardonable sin in that department is to be a day late with your alerts to the metropolitan newspapers and radio stations on the arrival of the "Greatest Show on Earth."

Well, on that day you should have seen the frantic exodus of press agents and reporters from Eighth Avenue bars. One agent, lost in Harlem, had glimpsed by chance the first section rolling into the New Haven's Mott Haven yards near the Harlem River and had given the alarm. That indicates how close a race it was.

MAYBE you picture the circus people as starting to load their train at the close of the night show. Not so. Loading begins when the noisy calliope on the rear of the morning parade returns to the lot. Equipment which will not be used in the day's two performances is taken back to the train, and the loading gets under way.

The cook tent is dismantled as soon as the last of the circus people have finished their late afternoon meal. Tables, benches, dishes, and so on are placed on the first outgoing section of the long train. That section is miles out of town before the evening show ends. No meals are served on board but each section has a "pie car" which dispenses snacks.

Wreck of Al G. Barnes Four-Ring Wild Animal Circus train at Canaan, New Brunswick, in 1930 was considered lucky because rain saved lives of 80 employes. (See page 25.)

The movement of circus and carnival trains is arranged months in advance of the actual runs. Contracts guarantee that the carrier will deliver the train at its destinations in ample time for the opening performance. On the day of movement, the railroad men involved are tense. Extra train and engine crews are called. Each section moves as a solid unit.

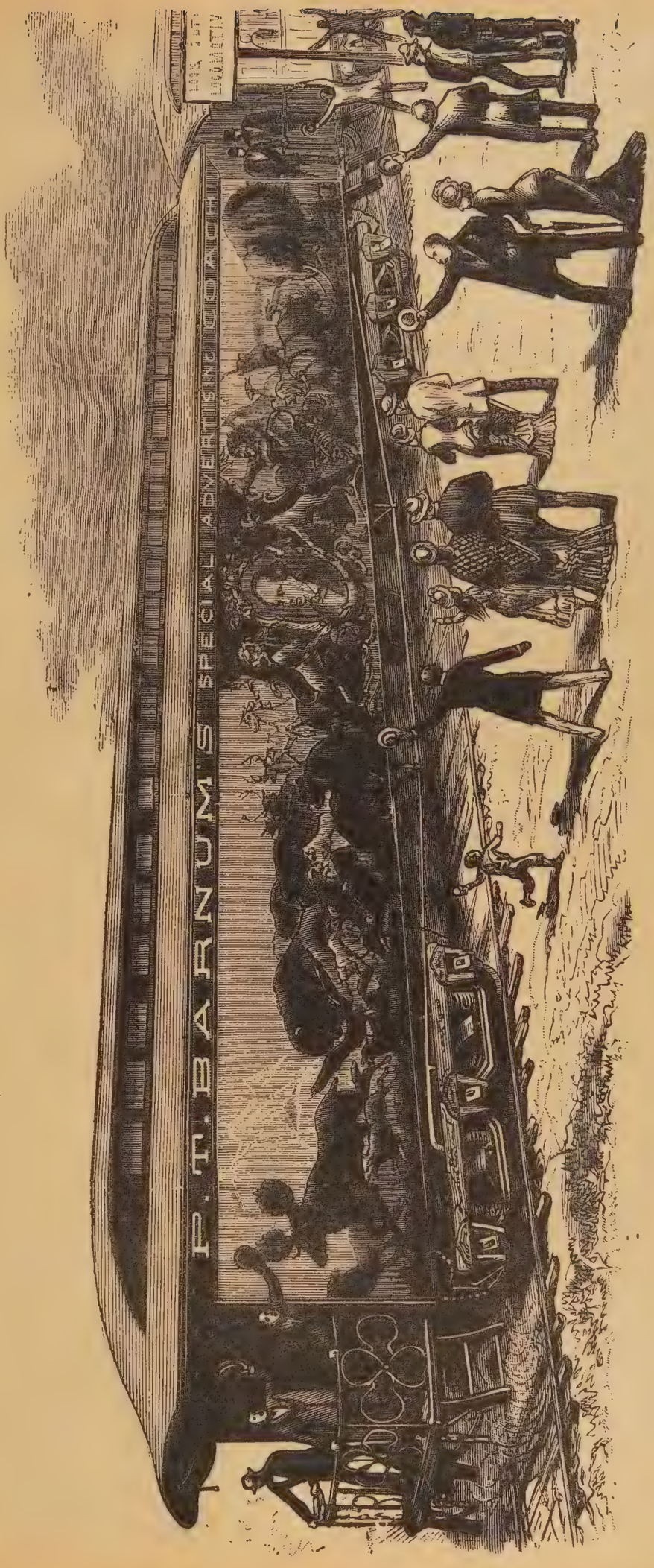
Largely because of the section's immunity to handling and switching en route, it is highballed by dispatchers with a minimum of delay. And how do the dispatchers feel about it?

"Naturally," says Thomas O. Acree, a retired Southern dispatcher, "*any* special movement over a division will, to some extent, disrupt normal procedure. Even on double-track, or on single-track equipped with CTC, the circus train is a bit of a nuisance, while on single-track without CTC and governed primarily by train orders it is a real problem.

"No dependable time is set for the various sections to leave their initial station. This often results in the changing or annulling of outstanding train orders, which delays the service. Then, too, because some cars are more or less antiquated and lack the maintenance that modern equipment gets, a dispatcher is never surprised when one of the sections ties up a division with a hotbox, a broken knuckle, or a yanked-out drawhead.

"Besides, circus trains are not permitted to travel as fast as redball freight. That is because some of the gaudily painted wagons loaded on flatcars are topheavy and because of the presence of animals, wild and domestic. A circus-train wreck costs the carrier plenty of money."

ONE NIGHT in August '82 before days of the Westinghouse air-brake and the automatic coupler, the Sells Brothers Circus train descended one of the Louisville & Nashville's steepest grades en route from Richmond, Ky., to London, Ky. Unknown to the engineer, a link-and-pin coupler broke, cutting the train in two. Just before he reached the bridge over Paint Lick Creek he slackened speed, and the latter part of the train crashed into the first part. Many cars rolled down an embankment to the creek.

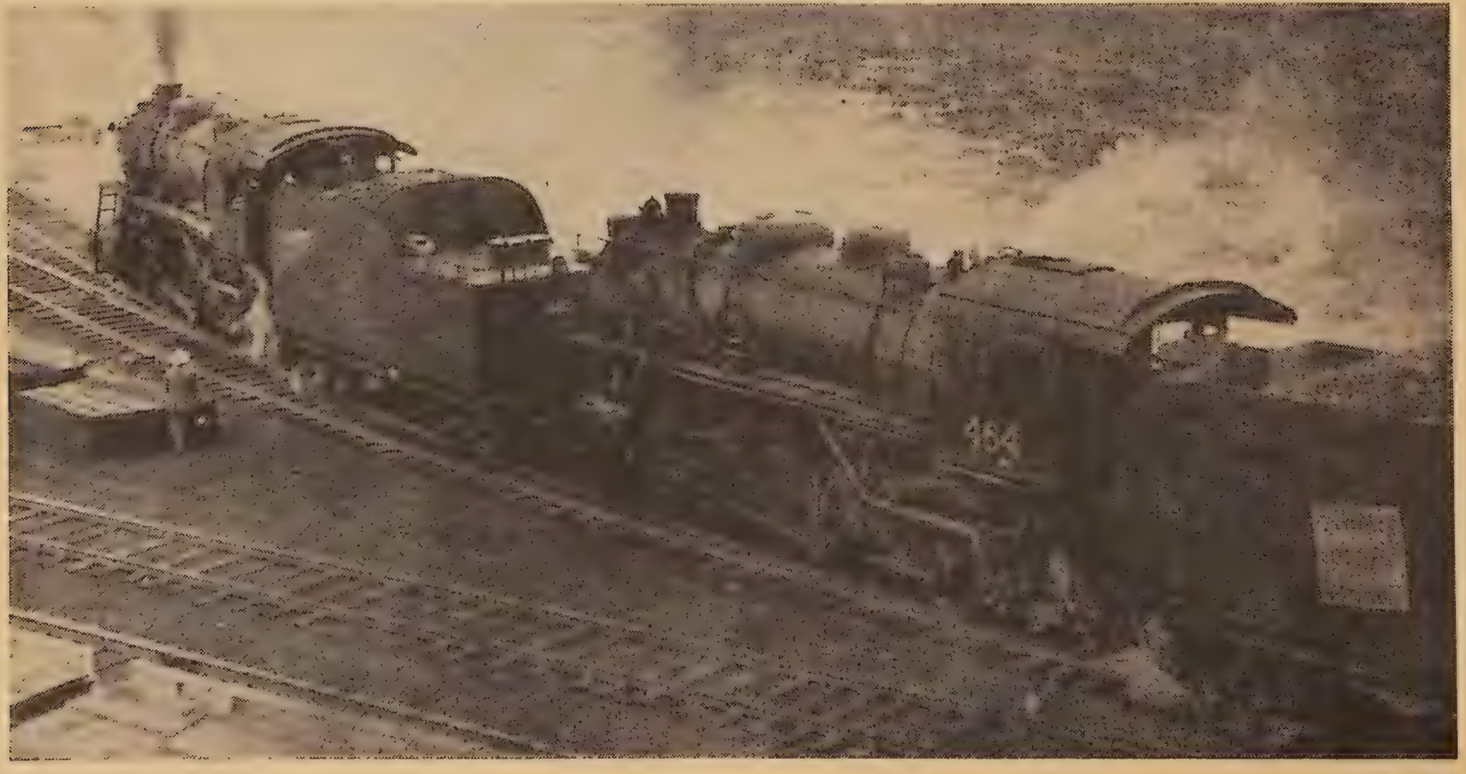


Culver Service

Advance guard of "Greatest Show on Earth" was eye-catching car jammed to the roof with lithographs, bills, paste pots, slap brushes, and step-ladders.

George Corey and Stanwood K. Bolton, Rail Photo Service

Two views of the third section of Ringling-B&B train doubleheaded over the Central Vermont Railway at Montpelier Jct., Vt. This section consists of 2-8-0 engines 465 and 464 with 28 freight cars and a CV caboose. The first section comprised engine 707 with 24 passenger cars. The second section, powered by Nos. 462 and 474, had 28 stock cars and a CV caboose. Total, five engines, 80 circus-owned cars, and two cabooses. Yes, on some roads the circus trains are still hauled by steam.



A locomotive, running light, picked up two doctors and rushed them to the spot. One of them, Dr. J. B. Kinnaird, had this to say:

"The cars and contents were demolished. A heap of dead and dying, the howls of frightened wild animals, the confusion in the dark, and the cries of dazed men and women made an impression I can never forget. We reached the scene of disaster just in time to witness the corralling of the lions and tigers. The big cats had escaped but were driven back into their broken cages by pitchforks and the cages were covered with canvas.

"Three persons had been killed by the crash and others were injured. On the body of one dead man we found an affectionate note from his sweetheart urging him to come home in time to attend the circus.

"Among the show equipment destroyed were an electric-light plant, an innovation at that time, and the gilded band wagon, ornamented with carved figures of gods and goddesses, dragons and gargoyles. Some of those figures may be found today in homes all over Garrard and Madison counties, used as parlor decorations."

Walter L. Main always believed that the wreck of his train on May 30, 1893, near Tyrone, Pa., was caused by the elephants Jennie and Lizzie, in a tall-sided car just behind the tender, shifting their ponderous weight while the train was rounding a curve on a down grade at high speed.

The circus had completed a one-day stand at Houtzdale, Pa., and the train—seventeen cars in those days—pulled by engine 1500, was speeding along a Pennsy branch line when the elephant car toppled over at McCann's crossing and in a split-second the following cars left the rails with a thunderous crash of splintering wood and twisting steel.

All the cars except the three sleepers and the caboose plunged over a steep embankment, killing five men and injuring ten. Thirty-nine horses and ponies, two of them rosinbacks (trained horses used by bareback riders) perished in the smashup.

Lizzie's head was pinned down by the wreckage. As soon as men began removing the obstructions the mighty pachyderm arose to her feet, unhurt, and shook off the large timbers like straws. Jennie, the other elephant in the first car, was slightly lamed by the wreck. The elephants pulled up turf and threw it high in the air as if to show their disapproval. Monkeys, escaping to nearby trees, kept up a constant chatter while the rescue work was going on. Women bareback riders sobbed as they bound up the wounds of trembling white Arabian horses.

Delegation from the far-off plains of Asia and Africa takes the air.

A royal Bengal tiger sprang for the neck of a zebra, which escaped by a quick sidestep. Later the big cat killed a sacred white ox from India, belonging to the circus, and a common cow on a nearby farm, before it was shot dead.

The circus owner, Walter Main, saw that a huge ape had taken possession of a stump and was baring its teeth at anyone who approached. He asked a Negro roustabout to lasso the brute.

"Jasper, you go over and see what you can do. He won't hurt you."

"I knows he won't, Mr. Main," Jasper replied, "'cause I ain't goin' anywhere near him."

Some animals escaped to the woods and have since furnished the basis for countless tales. For example, a mail carrier driving his two-horse team along a lonely road caught sight of a panther, and as late as 1898 a kangaroo was seen hopping around in the mountains near Tyrone.

The bodies of two men killed in the wreck, unclaimed by relatives, were buried in a local cemetery and *The Billboard* magazine placed markers over them. Since then it has been a custom for circuses playing Tyrone to lay flowers there. Show people, like elephants, never forget. Al Ringling, one of the five brothers, knew where his old troupers were buried and whenever his circus played such a town he would decorate their graves.

ONE CIRCUS-TRAIN smashup is recalled by railroaders as a "lucky" wreck. On June 27, 1930, the train was carrying the Al G. Barnes Four-Ring Wild Animal Circus on Canadian National rails en route to Charlottetown, Prince Edward Island. It was on a dark, rainy, Saturday night.

"After loading twenty-five big heavy wagons onto the flatcars in a drenching rain, we were all tired," said the assistant trainmaster, George B. Genac. "I rode the caboose. As we started I noticed that, on account of the storm, the roustabouts headed for the sleeping car instead of wrapping up in blankets under the wagons on the flats, as they usually did.

"By daylight the rain had stopped and we were nearing the bottom of the grade going into Canaan, New Brunswick, at a 55-mile clip, when I went out to the rear platform. Suddenly I

was hurled down into the cinders!

"Glancing up, I saw the sleeping car rise in the air, crash across the decks of three flats, and then dive into the corner of a tool shed, slanting upward at a crazy angle. I ran over there. I knew eighty men were in that car, sleeping at close quarters.

"When I reached the car I heard nothing. Just then the water tank in the roof gave way, pouring water into the car. Someone yelled: 'Get up, everybody! The ferry boat's sinking!' And then, to my happy surprise, all eighty men scrambled out, unhurt! That was one rare time when rain was lucky for a circus."

The most disastrous of all circus wrecks was caused by kidney pills. Alonzo K. Sargent, engineer of a westbound troop train on the Michigan Central, took some of the pills just before he set out on a run, and these, doctors said later, made him drowsy. Two miles east of Ivanhoe, Ind., the train passed an automatic block signal set at caution, a red signal, and finally a flagman on the job protecting the second section of the Hagenbeck-Wallace show.

The troop train did not even slow down! Alonzo was asleep at the throttle. Like a mighty battering ram his engine, No. 8485, plowed into the rear of the circus special. The wooden cars crumpled like matchboxes and burst into flames.

Clowns, bareback riders, trapeze artists, and acrobats, many of them widely advertised veterans of the big top, perished in the grinding, shattering crash. Beauty, brawn, and skill were killed by the impact—a total of 68 men, women and children! And 127 injured.

The survivors were taken to Hammond, Ind., where they were to have given a performance that day. Instead of entertaining gay crowds, a pitiful group of circus men and women milled around a red gilt-trimmed bandwagon seeking word of their comrades. From behind the bars of the ticket-wagon window, Manager Gollmar grimly compiled the casualty list. The survivors filed past the window to report they were still alive. One of the clowns, Joe Coyle, wailed from under a mass of bandages.

"There'll be no circus in Hammond tonight—the kids will get left this time!"

The wreck occurred June 22, 1918. Joe, whose wife and children died in it, is still working as a clown, 38 years later.

HUNDREDS of people who just can't resist a circus, turn out at daybreak to "supervise" the unloading. Many stand there for hours.

Have you ever watched the unloading of a Noah's Ark on wheels? The train scarcely comes to a stop before it is attacked by a horde of roustabouts, each of whom has his appointed task and each of whom appears as if by magic. Key men toot shrilly on whistles and the tremendous job of removing scores of wagons from the flats is begun. One crew knocks the chocks out from under the wheels and unlocks the chains which further secured the wagons, trucks, and so on into position on the train.

Others pivot flat pieces of steel across the spaces between the cars so that the equipment might be rolled the length of the train. Cages are wheeled hollowly over the iron runways between the cars. Horses stamp down the ramp from the long brightly-painted cars and haul striped, spangled wagons to where teams of sweating razorbacks drive stakes.

While this is going on, a shrill trumpeting from the end of the train calls attention to the elephants. These great animals travel in huge barnlike stock cars and are now pouring out of the doorways. In less than one hour's time from arrival the seventy-foot flatcars are picked clean of their cargo.

Each wagon has its number and allotted place, and is placed to the best advantage for convenience in unloading and for utilizing space. A wrongly packed vehicle would cause endless confusion and delay.

DID YOU ever hear of a circus train "going to sea?" That is what happens when Ringling-Barnum & Bailey outfit visits Long Island You see, the Long Island Rail Road has a direct interchange only with the New Haven, at Fresh Pond. All of the LIRR's other interchange is by car float.

In 1952 and '53, when "The Greatest Show on Earth" visited the Island, it came from points in New Jersey via the Pennsy. The trains were broken into segments at Greenville yard to be floated across upper New York Bay to the LIRR's Bay Ridge yards.

The trainmaster has to remember that in the floating operation the cars would be turned around. If he loaded and dispatched them in the usual order they would be facing the wrong way at the stub and unloading tracks. Thus the tractors and other unloading motive power aboard the flatcars would be bottled up at the opposite end of the unloading ramp.

In 1952 this worked out fine. But in '53 there was haste to get the circus to Greenville and across the bay before a gale came up and somebody on the Pennsy forgot about the unloading. Half the circus equipment was turned the right way, half wrong.

And so, after receiving half the cars at Bay Ridge, before the tide got too high, LIRR crews had to spend several hours turning the extra-long cars on the wye at Fresh Pond and reassembling the train before sending it on to its destination.

The tide rose rapidly while the rest of the equipment, including all the animals, was crossing the bay. It got so high that the floats carrying the cars couldn't be docked at Bay Ridge and had to ride the choppy water of the bay for hours. As a result, the circus lost so much time that it had to cancel its afternoon show.

THE TWO biggest circuses own their railroad flatcars, stock cars, and sleepers, and move in freight service. Lesser outfits, known as car shows, consisting only of baggage and sleeping cars, move in passenger service. They almost never call themselves rail shows.

Instead of moving on a freight contract, car shows buy a certain number of first-class passenger tickets. This purchase entitles them to use Pullmans and baggage cars.

In 1918, when the car show owners organized to fight a rate increase, *The Billboard* figured there were 320 cars owned by shows in passenger service. Most of them were two-car circuses. The others included minstrel

shows, *Uncle Tom's Cabin* troupes, magicians' shows, Wild West outfits, carnivals, and even tented movie shows.

Most of these outfits hit the skids in the 1920's, mainly because railroad rates got out of hand. Besides, the elimination of many local passenger runs left too few trains to which shows could couple. It was no longer possible to keep to a tight schedule of one-day stands. The last two-car circus passed out in 1936.

About that time a new kind of car show appeared. The indoor kind. These own no railroad cars. They move only elephants and horses plus a limited amount of rigging, properties, and trunks, as well as the personnel.

Among the circuses traveling this way now are Polack Brothers, Hamid-Morton, and the Orrin Davenport. Each plays major cities and generally stays several days in a location, so there is little difficulty in making their schedules fit railroad timetables.

In the "golden age" there were at least 25 railroad circuses. By 1920 there were fifteen. In 1929 a dozen circuses were being moved by rail in the States and Canada, using 345 cars. The Depression cut this number to three, with 165 cars, in 1934. Then a recession set in. There were six circuses with 305 railroad cars in 1938, but these figures dropped the following year to two shows with 100 cars.

Great steel flatcars were given to the blow torch, while the once gaudy coaches rotted on rusty sidings. The long-time home of three famous circuses, Peru, Ind., became the ghost town of the show business.

Tom Parkinson, *The Billboard's* circus expert, attributes this sharp drop to "a series of crippling rate increases." However, the circus business rallied and in 1944 there were three circuses trouping 115 cars, and in 1945, six shows with 160 cars.

Then business leveled off, and the rail rates kept going up. The number of railroad circuses skidded again.

Few rail-shows moves are made for a price comparable to that shown on the rate schedules. There are extra charges for moving a train in more than one section, for the use of sidetracks and crossings, and for switching. Circuses also pay extra to be hauled through certain yards and across some bridges.

One railroad, looking for a place to load on more charges, assessed a circus for a series of additional locomotives spotted along the route, unused and unrequested but "available in case of a breakdown" of the road's first set of engines.

Says Mr. Parkinson, "One railroad has even seen fit to submit a bill to a show for payment of regular railroad detectives."

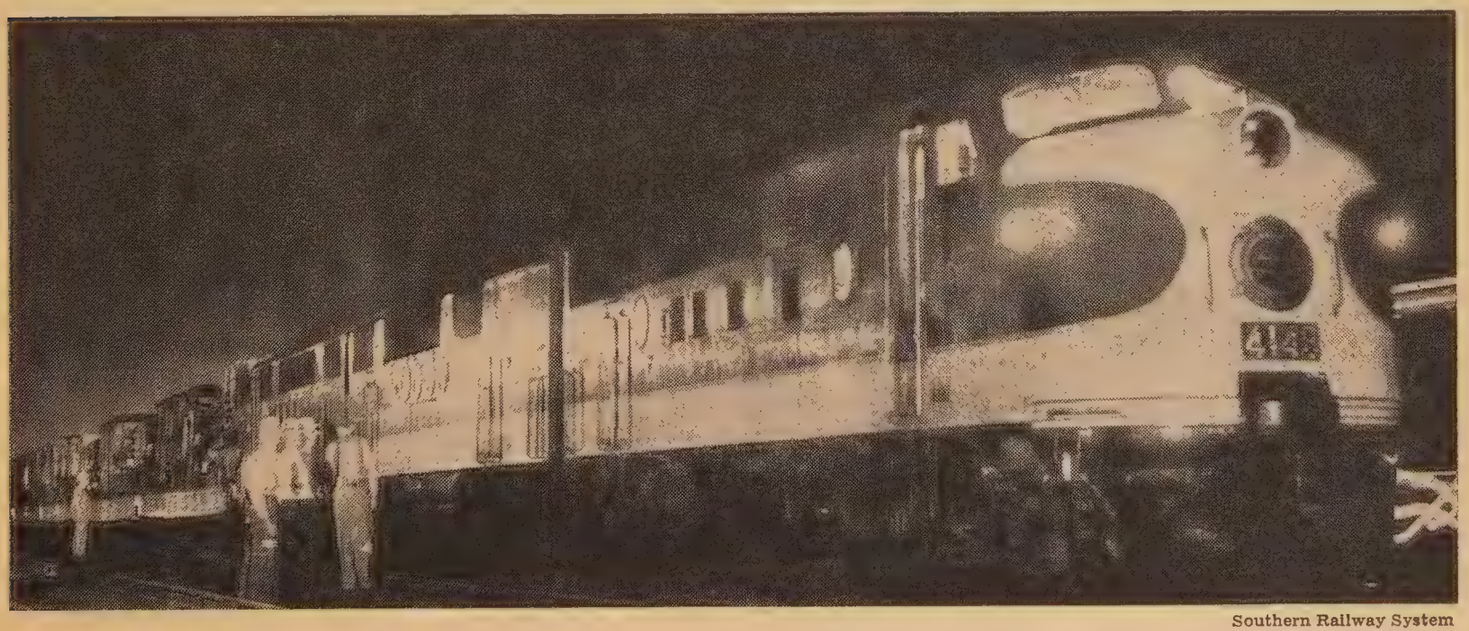
And so, partly for these reasons and partly because of television, movies, radio, and automobiles, the number of circuses traveling by rail in the States and Canada dwindled. Some were merged or abandoned. Others, beginning with Cook & Lent in 1916, motorized.

An early attempt to motorize, made by Dick Ringling, son of one of the "Brothers," was a flop. Only comparatively small jumps could be made between the one-night stands. Performers and laborers could not get much sleep en route. On top of that and the initial investment in the trucks and the cost of their upkeep, breakdowns disrupted schedules, created ill will, and caused financial loss.

So you needn't think that motorization is the answer to a show owner's prayer. It may have seemed so at first. But now the honeymoon is over.

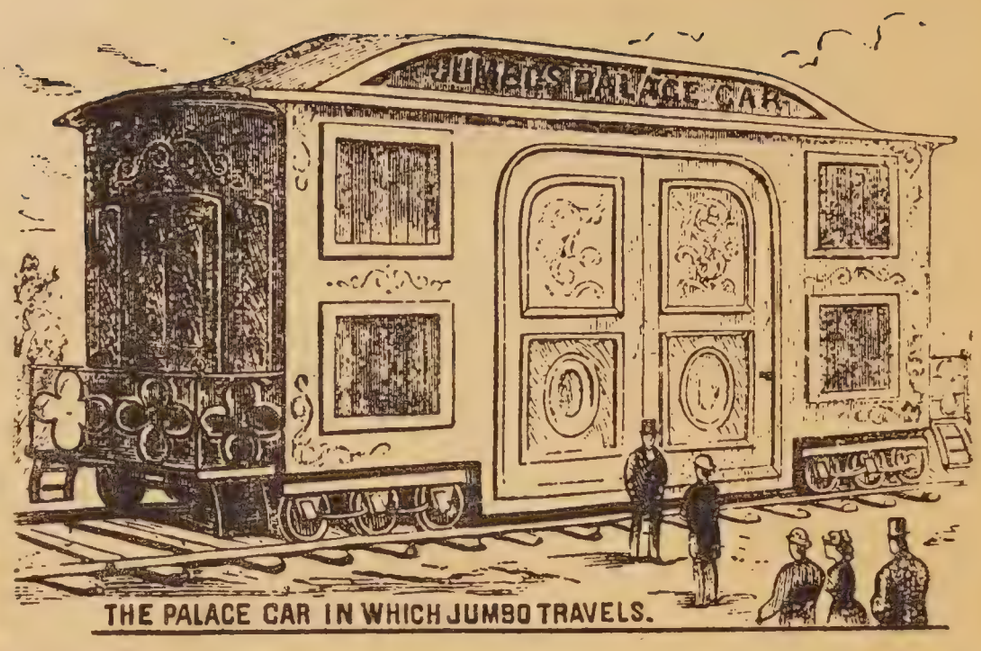
"Motorized circuses and carnivals," Parkinson reports, "become entwined in a maze of conflicting and restrictive laws as state after state turns on the general truck-freight field. States charge more for permits and licenses, lay down new laws about size, length, and weight of trucks, and restrict hours, routes, and speeds at which trucks may be operated."

Many owners of shows now rolling along the highways want to get back to the twin ribbons of steel. An adaptation of the "piggy-back" system is a lively possibility. After all, it was the railroad that made the three-ring circus possible. For the past hundred years the iron horse has played a leading role in the glittering drama of the big top.



Southern Railway System

First section of "Greatest Show on Earth" is about to leave Cincinnati behind Southern Railway diesel No. 4148.



THE PALACE CAR IN WHICH JUMBO TRAVELS.

P. T. Barnum, the master showman who said, "There's a sucker born every minute," grew rich and famous on a policy of fooling the public. He liked to exaggerate. For years his major exhibit was Jumbo. It is true that Jumbo was the world's largest captive animal, but you couldn't say that Barnum's artist drew this publicity picture of the car to scale.

SAGA of the ELEPHANTS

For 100 Years Those Big Fellows Have Been Riding the Rails,

Playing Pranks, Switching Cars, and Unloading Circus Wagons from Flats

MOUNTAIN GOATS in the high Rockies looked down upon a strange sight on a long-ago summer day in 1882. They saw a Mason eight-wheeler, her polished brass gleaming in the bright Colorado sun, three boxcars, and a coach, all bedecked with banners and bunting, crawling upgrade over the narrow-gage track of the Denver, South Park & Pacific—560 curves in 55 miles—with the John Robinson Circus en route to the lusty gold and silver mining town of Leadville.

The fact that the gold diggers had plenty of money to spend on entertainment prompted Mr. Robinson to make the arduous trip with the pick of his personnel, equipment, and trained animals, including two elephants. All circus elephants, by the way, are known as *bulls,* regardless of their sex.

It was hard going. Much of the single-track line had been blasted out of solid rocky ledges only three years before, and the summit of the long stiff grade, 10,200 feet above sea level, was the highest point reached by any North American railroad.

In the rugged Kenosha Pass, half a mile east of Webster, the puffing little engine balked at a four percent grade. Her drivers failed to take hold, even when the fireman poured sand on the rail, and Engineer W. D. Penny kept them from sliding downhill only by slamming on the brakes. The thunder of the engine's exhaust must have startled the wild goats on far-off peaks. It did evoke a nervous trumpeting from the elephants in the first boxcar.

The train was definitely stalled. To double that hill with a circus would have been dangerous as well as time-consuming. What to do? The South Park conductor had probably never heard of the Alpine grade-buster named Hannibal but the bulls' trumpeting gave him the same general idea for getting over the hump.

"All we need," he told the hogger, "is a little extra push."

Mr. Penny agreed and so did Mr. Robinson. The bull handler unloaded his pets, harnessed them together, and put them to work on the sky trail where a slip could mean death. The engineer released his brakes and opened the throttle wide, while the fireboy kept a wary eye on the steam gage and the two brakemen stood atop the boxcars clutching brake wheels, just in case.

It was a tense moment, but as Mr. Penny said later, "The big boys jammed their heads against the rear end, grunted, and up we went. I could feel the force of their shove."

Nature has equipped elephants to push great weights. In addition to their brute strength and tonnage, the

front and top of their skulls consist of spongy, liquid-filled, bone tissue that protects the brain from heavy impact. Circus bulls over the years have often helped to switch railroad cars, unload the bright-hued wagons from seventy-foot flats, drag those vehicles through thick mud, if need be, raise and lower the big tent, and reload the flats at night. Today, however, most of that work is done by trucks, tractors, caterpillars, and bulldozers.

MANY an elephant has shown heroic qualities in a crisis. There was Minnie, for instance. On the night in 1911 that a train carrying Buffalo Bill's Wild West Show was wrecked, a steel car containing Minnie and a trained pony turned upside down in a ditch. Laborers who pried open the car door, expecting to find both animals dead or critically injured, shed their lantern light on a weird scene.

Minnie had braced her tremendous weight with her head and shoulders against one wall and her hind legs against the other. That awkward pose must have been a strain on her. She could easily have let go and rested on the car ceiling below. But if she had done so, she would have crushed the pony to death, for the helpless little animal was directly beneath her.

Max Gruber, the boss trainer, kept soothing Minnie with words of praise until a wrecking crane could be brought up. Then they raised her bulk and got the pony out. After that Minnie relaxed for a short time on the car ceiling. The big hook helped her to turn around and make her way through the battered door, while the railroaders and roustabouts cheered. Neither animal was hurt. Such deeds as Minnie's lead the circus men to overlook more than a few cases of pachyderm temperament.

Old Mom was another beast you could trust till the last flag was whistled in. The story comes from Louisiana. Like the other circuses, Sells-Floto employed a 24-hour man—that is, an agent who traveled a day ahead of the circus to handle last-minute details—but one time the Sells-Floto man slipped up. Reaching the town chosen for the next performance, he wired back to the manager of the circus:

"Bad trestle here. No wye within 15 miles. Load poles to the engine."

This meant, of course, that the gilt-trimmed red and blue wagons were to be placed on the flatcars with their tongues pointing toward the head end of the train so as to facilitate unloading. Otherwise, according to the telegram, teams of horses could not wheel the heavy vehicles onto the steel runways and down to the ground—except by the slow and laborious process of backing the wagons off the flats. And, as the advance man had stated, there was no way of turning

Chicago & North Western Railway

Elephants have often done the heavy work of unloading circus wagons from flatcars. Scene in Chicago. A Ringling Brothers and Barnum & Bailey vehicle reaches the runway. One of the men on top is handling the brake which, with the "snubber" (not seen in photo), will ease the wagon down the incline. Other men will guide the wagon and then elephants will haul it away.

around the train of forty-odd cars within fifteen miles of the town.

He should have told his boss to load the wagons facing the caboose. The glittering trainload of animals, wagons, and performers was spread out over a trestle for the best part of a mile—and a through passenger train was due on that same trestle in an hour!

The circus manager cursed and tore his hair. Then he called the elephant boss.

"Get Old Mom here fast!"

He knew that Old Mom, who showed skill in her balancing act under the big top, could work in a narrow space on the trestle where horses couldn't. With Old Mom's help, he could unload the flatcars frontwards. Roustabouts, sweating and straining, laid the steel ramp for the unloading and additional steel to serve as runways between the flats. The key man in this operation, the poler, used the wagon tongues to guide along the flats the wagons that Old Mom, in harness, was pulling.

From one flatcar to another, rolling the wagons off, one after another right on down the line, the big elephant threw her skill and ponderous weight into the race against time. It was a close call, but Old Mom never faltered. When the express train reached the trestle on schedule, the circus special had been unloaded and the empty cars pulled off the main line. Old Mom had saved the day!

CIRCUS elephants are like that. As a rule, sturdy, patient, and dependable. They enjoy taking a fling now and then, as who doesn't? And if some of them run amok, spreading a trail of destruction, or even become killers—well, so do some people. Considering what they have to put up with, train-riding bulls are remarkably well-behaved.

One of P. T. Barnum's elephants, Emperor, took a sudden dislike to the railroad car in which he traveled. Instead of entering it that night after the show, in answer to the keeper's roll call of elephants' names, he walked away from the railyard and kept on walking until he came to an iron foundry. There he carelessly stuck a big foot into a shallow pan of molten hot metal. Moaning in pain and anger, he tossed aside two people, injuring them both, limped back to his car, and waited calmly while the circus doctor wrapped his sore foot in bandages soaked with sweet-oil. That was the last time Emperor disobeyed.

Another case comes to mind. In the late summer of 1928 a restless herd of Sells-Floto elephants stampeded and set off to explore the majestic Canadian Rockies on their own. It was fun at first, no doubt, but one of the bulls got separated from the others and died from exposure in the high altitude before the rest were rounded up. A harried Canadian Pacific dispatcher put out a unique order:

To all trains west. Keep lookout for elephants on track. Advise if sighted, from first telegraph office, giving location.

The pranks that elephants play on board trains would fill a book. Take Babe, for example. When Babe was a youngster with a squirming trunk only three feet long she was shipped by express from New York to Mankato, Minn., in charge of showman Al G. Barnes. Al rode a Pullman on the same train. Somewhere in Ohio, the New York Central conductor awoke him, saying:

"Sorry to disturb you, sir, but that elephant is raising hell."

Al threw on a bathrobe and hurried forward. Babe had cornered the unhappy express messenger and was pelting him with packages, the man yelling every time Babe scored a direct hit. Al grinned. He knew the animal was only having fun. But he shortened

All circus elephants, male and female, are called *bulls*. Here, the Ringling-B&B herd marches along a highway from

her stout rope and helped the messenger to move the shipments beyond her reach.

Later that night a sudden jerky stop awoke him again. The engineer said, "Somebody pulled the air on me," but no one knew who had done it or why. Al Barnes had a hunch. Entering the baggage car, he found Babe, hidden behind a pile of express shipments, jiggling the emergency cord.

"You again?" he accused, and he finished the night in that car to keep his baby out of further mischief.

More recently, the Polack Brothers Circus was shipping three elephants in a Norfolk & Western baggage car. One animal caught his trunk in the emergency cord and, while trying to free himself, yanked it out by the roots, thus stopping the northbound *Pocahontas* two miles east of Crewe, Va. A look-around showed nothing wrong, so the train proceeded to Crewe. There the elephant handler told the conductor what had happened.

"I couldn't tell you before," he added, "because I had to stay with the big boys. That one," pointing, "was so scared by the air seeping from the brake valve that he shook like a leaf."

Oldtimers of the Milwaukee Road recall when a frisky elephant belonging to the Ringling Brothers and Barnum & Bailey Combined Shows poked his long trunk out of a tall-sided stock car and picked up a flimsy from a train-order stand at Davis, Ill. He had watched the fireman slip an arm through a loop to get the engineer's order, and he followed suit. Luckily the Davis telegraph operator, R. V. Stickler, had seen the act. He managed to place his triplicate copy of the order on the stand in time for the conductor to grab it as the caboose rolled by.

Yeah, elephants are playful. The same circus was unloading at Winona, Minn., in a nasty rain under the direction of Harley Thayer, the tough assistant super of the Chicago & North Western's Madison Division. Thayer was known for his mule-skinner vocabulary and the old straw hat he wore in all kinds of weather. He worked like a fiend in the rain and mud. Suddenly his waterlogged hat popped open at the brim. Just then an elephant, pulling a mired circus wagon, flicked off the grotesque hat and ate it. You can write your own words and music for what the bareheaded official said at that moment.

A classic of dubious authenticity tells about a thirsty elephant in the first car of a train poking his long trunk into the tank of a locomotive tender and draining it dry. You run across different versions of this story, such as the engineer mistaking the trunk for a brakeman's hand signal.

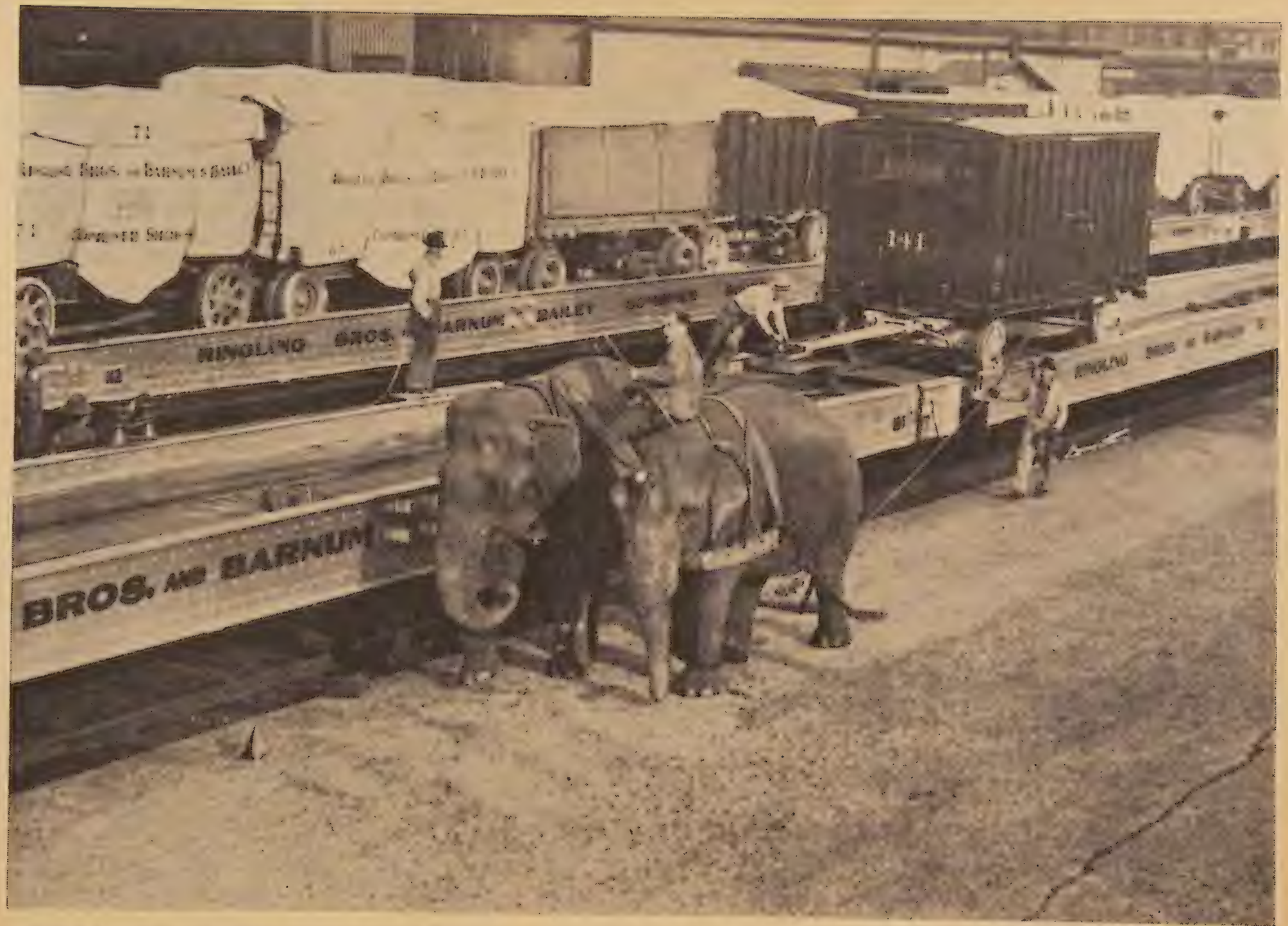
Charles Ringling, one of the "Brothers," showed his publicity sense by inviting Woodrow Wilson to ride a circus elephant named Ruth, but the President quickly declined. Too bad! It would have made a good picture, the Democratic Party chief riding the Republican symbol.

Charles liked to recall the day when Ruth, just unloaded from the train and standing in line with the other bulls, calmly pulled up her leg stakes, lumbered over to a ten-gallon stand of pink lemonade, drank it all, and then resumed her place in line as if nothing had happened.

The big fellows need plenty of water and they need the vitamin C that comes in fresh fruit and green vegetables. Captive elephants very seldom get the fruit they crave—unless they are sick. It's too expensive. For that reason some of them feign illness. And occasionally, when a show is quartered near a watermelon patch or an orange grove, the pachyderms stampede to gorge themselves on the luscious fruit. Others have been

Canadian National Railways

a Canadian National siding to the show grounds, with frisky small bulls chained to more sedate big ones.



Chester Photo Service

The gaily-painted circus wagons are rolled from one flatcar to another, over sheet-iron "rails" that connect the cars, before they reach runway pictured on page 29.

known to smash open fruit and vegetable cars to supplement their diet.

"Instead of peanuts or crackerjack," said a bull handler, "circus and zoo visitors would do the elephants a real favor by giving them ripe apples, oranges, grapes, grapefruit, or salad vegetables. But not peaches, which have large sharp stones."

JUMBO, probably the best loved and most publicized animal in all history, as well as one of the biggest, used to split a quart of beer with his English-born keeper, Scotty (Matthew Scott), on board the Barnum, Bailey & Hutchinson Circus train just before the two of them went to sleep after the night show. Man and beast were inseparable. They traveled in a mammoth car, Jumbo's Palace Car, painted red and gold, with wide double doors in the middle. Scotty occupied a bunk high in the rear.

Jumbo was the largest elephant in captivity. He weighed six and a half tons and measured eleven feet six inches in height. But despite his record-breaking size, he was always good-natured and he carried hundreds of thousands of children in a saddle on his back. His name added a new word to our language, for who hasn't eaten *jumbo* peanuts, *jumbo* frankfurters, and the like? Sometimes the jolting of his Palace Car or the scream of an engine whistle made Jumbo nervous and he would pass his long trunk over Scotty's bunk to make sure his friend was still there. A pat from Scotty's hand never failed to soothe him.

The giant pachyderm liked his pint of beer. One night Scotty forgot, guzzled the whole quart himself, and fell asleep. Jumbo's feelings were hurt. Lifting Scotty gently out of his berth, he laid the man on the Palace Car floor. Scotty took the hint. Never again did Jumbo miss his nightcap.

Born in Africa, Jumbo lived for a while at the Paris Zoo and then for seventeen years under Scotty's care at the London Zoo. P. T. Barnum bought him in 1882. Jumbo hated to leave the old familiar London Zoo. He sank to his knees before Scotty and whimpered piteously. This delayed the sailing to America. But at length Scotty's continued presence reassured him, and for three and a half years Jumbo was the main attraction of "The Greatest Show on Earth."

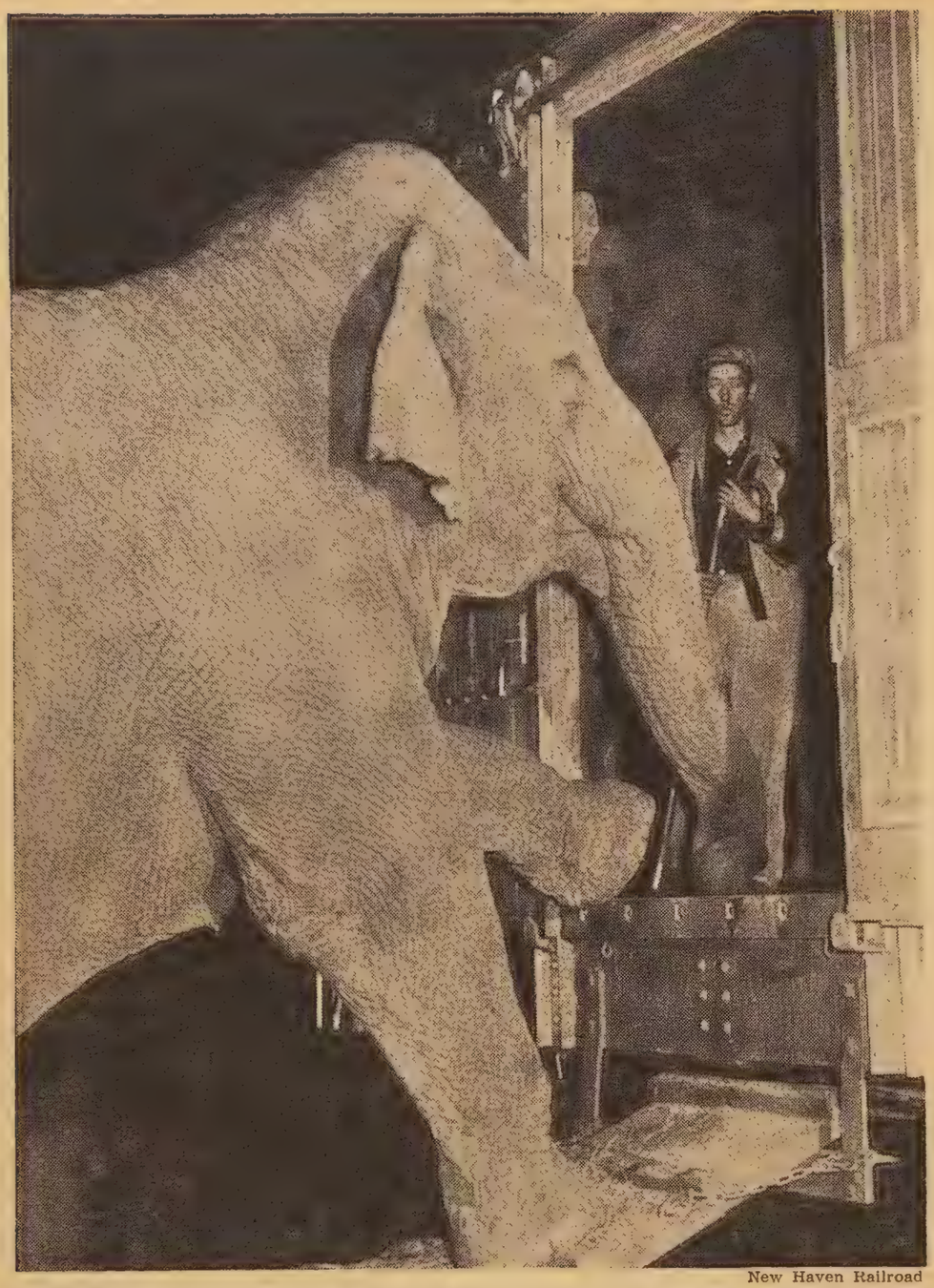
Canadian National Railways

This bull is so young he hasn't learned yet how to walk the gangplank.

On September 15, 1885, when he was twenty-four, the circus made what was intended to be a routine one-day stand in St. Thomas, Ontario, Canada, pitching its tents on a vacant farm near the Grand Trunk Railway station. The high point for youngsters

Canadian National Railways

Wonder what a baby elephant thinks about while entertaining little boys?



New Haven Railroad

Before the evening show ends, the bulls are marched from the big tent to their tall-sided stock cars. As each one's name is called he lumbers up a short gangplank to a waiting meal, a fresh straw bed, and an overnight ride.

who gathered at dawn to watch the unloading came when the stock cars were opened, and Jumbo's Palace Car, and thirty-one elephants stepped gingerly down a short runway to the ground and lined up in readiness for the glittering parade.

A milling crowd centered around Jumbo. After the parade he was led back to the circus lot. Peanut venders' whistles blended with the calls of side-show barkers and the shrieks of delight. There were children eating sweets, colorful toy balloons, penants whipping in the breeze, and the smell of animals and sawdust—in short, the glamour of the circus.

Jumbo returned from the parade thirsty. So much water had been drawn from the farm well that, while the planking over the top was still wet, the pump itself was dry. Jumbo extended his trunk for water, but Scotty said:

"Come on, Jumbo! The water's all gone. We'll have to get a drink somewhere else."

Thirsty as he was, the huge beast patiently followed his keeper away.

TRAGEDY hung over St. Thomas that day. A bareback rider named Nicholls was killed by a fall from his horse in the afternoon performance, but the audience didn't know it. And Jumbo had but a few hours to live.

The long circus train stood on a siding in the Grand Trunk railyard, separated from the single-track main line by only a narrow strip of cinders. The main line was built on a fill or embankment which dropped sharply about six feet to flat ground.

That night the thirty-one bulls were to be marched from the big tent to the train and loaded, to save time, before the evening show ended. It was standard procedure. The circus people confidently expected the main track to be clear during the loading, as the railway company had promised them, and they felt sure that, as an added precaution, a flagman would protect their train. But Fate ruled otherwise.

The first twenty-nine bulls were loaded safely. Last came Jumbo with a little clown elephant named Tom Thumb, who had closed the act. Scotty escorted them. They were walking along the dark track, lit fitfully by kerosene flares, with band music filling the air, when a westbound freight extra, No. 151, roared behind them on the main line!

That was two years before Grand Trunk freights were equipped with the new Westinghouse air brake. Engineer William Burnip, seeing the shadowy figures on the track silhouetted by his oil-burning headlight, whistled for hand brakes and threw his engine into reverse.

The animals trumpeted in terror and ran down the track. Escape to the right was blocked by the seemingly endless circus train on the siding. Scotty did his best to guide them to the left—a six-foot drop to level ground—but they must have been afraid of stumbling and falling down the fill in the darkness, for they both kept racing wildly ahead. Behind them, in the big tent, the band was still playing.

Tom Thumb, with shorter legs than Jumbo, lagged behind and was hit first. The engine, No. 88, hurled him off the track, breaking a leg—an injury from which the clown elephant later recovered. Engineer Burnip continued to tug at his Johnson bar, and while he could not reverse the engine in time he did slow her down.

Scotty was screaming hoarsely now.

His last hope for saving Jumbo was to get him onto the flat ground at the far end of the circus train.

The world's biggest animal almost made it, too. But 88 caught up with Jumbo, struck his hind legs, and rammed his ponderous bulk against a circus car. This derailed the locomotive, then tender, and the first freight car. The engine crew and Scotty saved themselves by jumping, while Jumbo suffered a broken skull and internal injuries. He died quickly.

As he lay dying on the track, the huge gentle beast reached up his trunk and drew Scotty closer to him in a last affectionate gesture. Scotty wept. Even the hard-boiled roustabouts and razorbacks burst into tears.

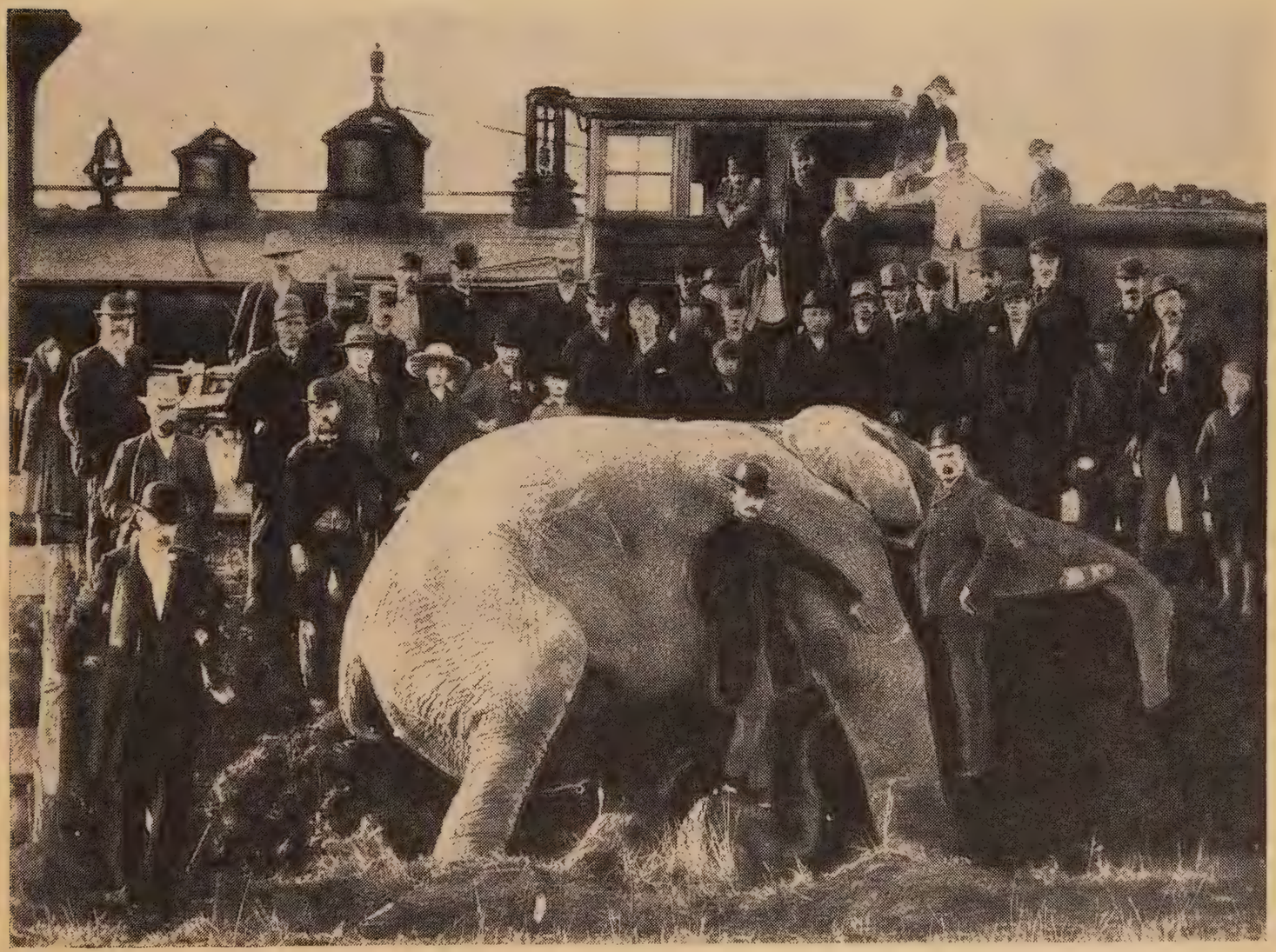
The accident occurred at 8:18 p.m. Who was responsible? Some men blamed it on short flagging. Whether or not there was any flagging at all is still a subject for debate, seventy years later. Fred R. Armes, the Grand Trunk's night operator at St. Thomas, said the circus management had been instructed not to begin loading before 9:55 p.m. and even then not until a yard crew helped them. There was no yard crew on hand at 8:18.

Telegraph wires and the new-fangled telephone spread the sad news all over North America, while the transatlantic cable took it to foreign countries. Publicity-hungry Barnum, wailing that he had "lost a million dollars," gave the newspapers a fantastic story about Jumbo sacrificing himself in order to toss the baby elephant to safety. P.T. sued the Grand Trunk for $100,000. Later, he settled for $4,400 but, through a flaw in his contract, lost even that sum. For years afterward, engine 88 bore a sheet-metal outline of an elephant on her oil-burning headlight.

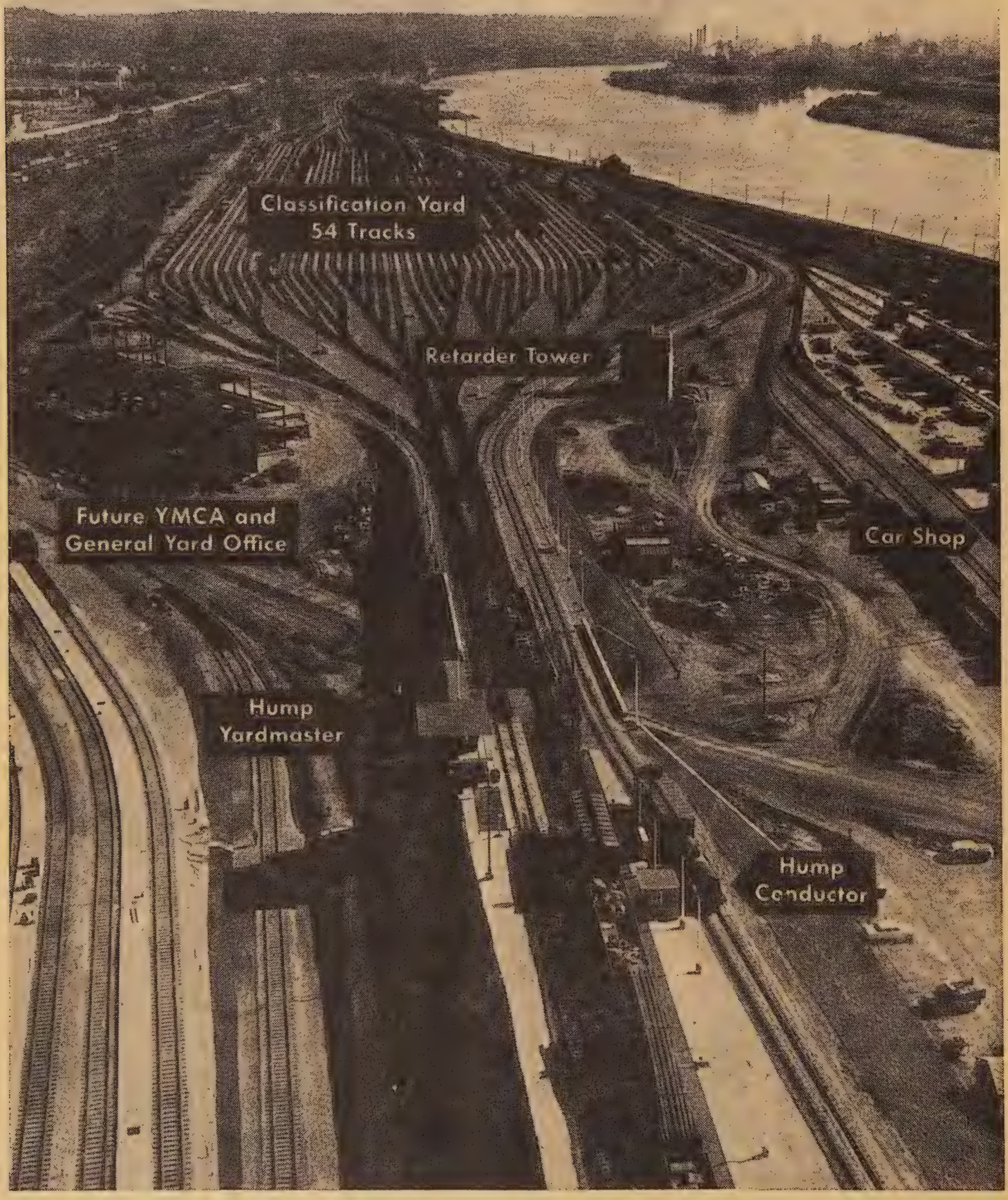
Meanwhile, Barnum hired a taxidermist to stuff Jumbo's hide and mount his massive skeleton; and during the next season the traveling circus displayed them both on a huge platform, beside a live female elephant named Alice, billed as "Jumbo's widow."

But disaster overtook Alice also. She perished in a fire which razed the show's winter quarters at Bridgeport, Conn., in 1886. Thereupon Mr. Barnum presented Jumbo's stuffed hide to Tufts College in Boston and the gleaming skeleton to the American Museum of Natural History in New York, where both may be seen today.

Thus P. T. Barnum, the master showman, though long dead, is still exhibiting the greatest elephant of all time.



Largest of all captive elephants, Jumbo was also the most publicized and the most widely loved. A Grand Trunk freight extra killed him one September night in 1885 at St. Thomas, Ontario. Photo was taken after his mammoth body had been hauled off the track. Standing beside Jumbo's head is the grieving "Scotty," his keeper and friend for many years.



Aerial view shows principal features of the Pennsylvania Railroad's new eastbound hump and classification yard at Conway, Pa., with 54 tracks. Much of this area is reclaimed riverside swampland, extending for nearly four miles along the Ohio. Operation climaxes ten years of planning and two and a half years of construction costing about $15 million.

FREIGHT YARD DE LUXE

Pennsy's New Conway Push-button Setup Is a Marvel of Electronic Efficiency, Featuring Control Panel with a "Memory," Tape Recorders, Other Modern Gadgets

THE EASTERN half of the Pennsylvania's new Conway yard, which has been in operation since last September 20, is just about the last word in freight classification, with facilities to handle more than 100 trains a day. It boasts dozens of new features to expedite this complicated work.

There are a nine-track receiving yard with a capacity for 1,139 cars; a two-track hump with 18 car retarders; a 54-track classification yard; and a nine-track, 1,146-car advance and relay yard for through trains. The yard's core is the hump, which can classify trains at four cars per minute. The hump conductor works a control panel with 54 identical push-buttons, one for each track.

The westbound half will be completed and put into operation late this year, bringing the total investment to $34 million, and a saving from two to 24 hours on all trains. ●

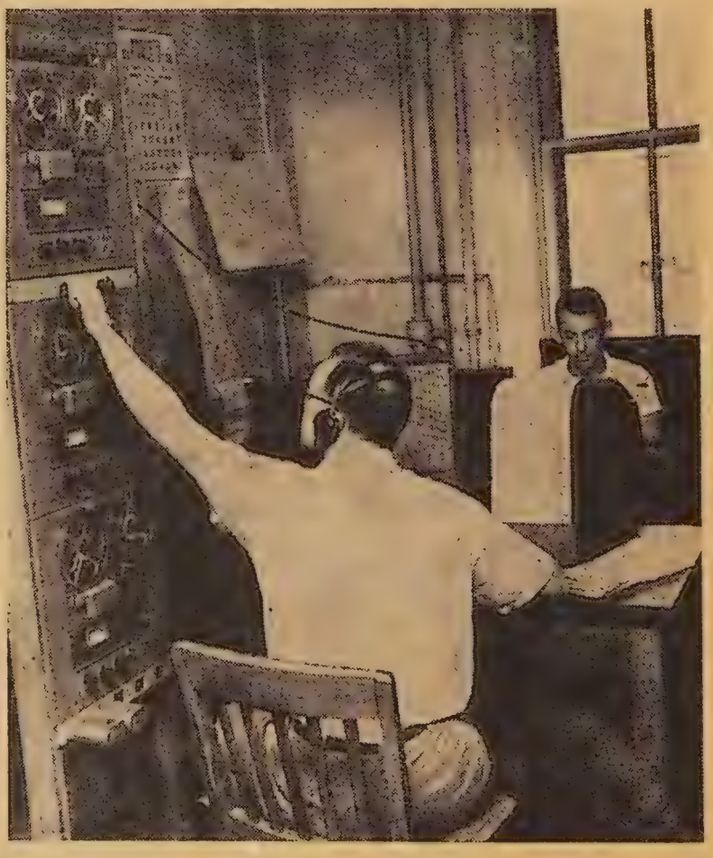
PENNSYLVANIA RAILROAD PHOTOS

As train leaves Conway, Scanner F. Whitehouse tape-records new consist. This type of equipment saves him from walking about fifteen miles a day.

Yardmaster's forty-channel communication system connects with loudspeakers all over yard. We see Yardmaster L. Stine and clerk Marjorie Talbert.

Conway Yard begins service as first car rolls off hump. Savings up to twelve hours are made on some freight schedules.

Ted Padezanin, car inspector, uses 29-ounce radio transmitter to report immediately which cars should be stopped.

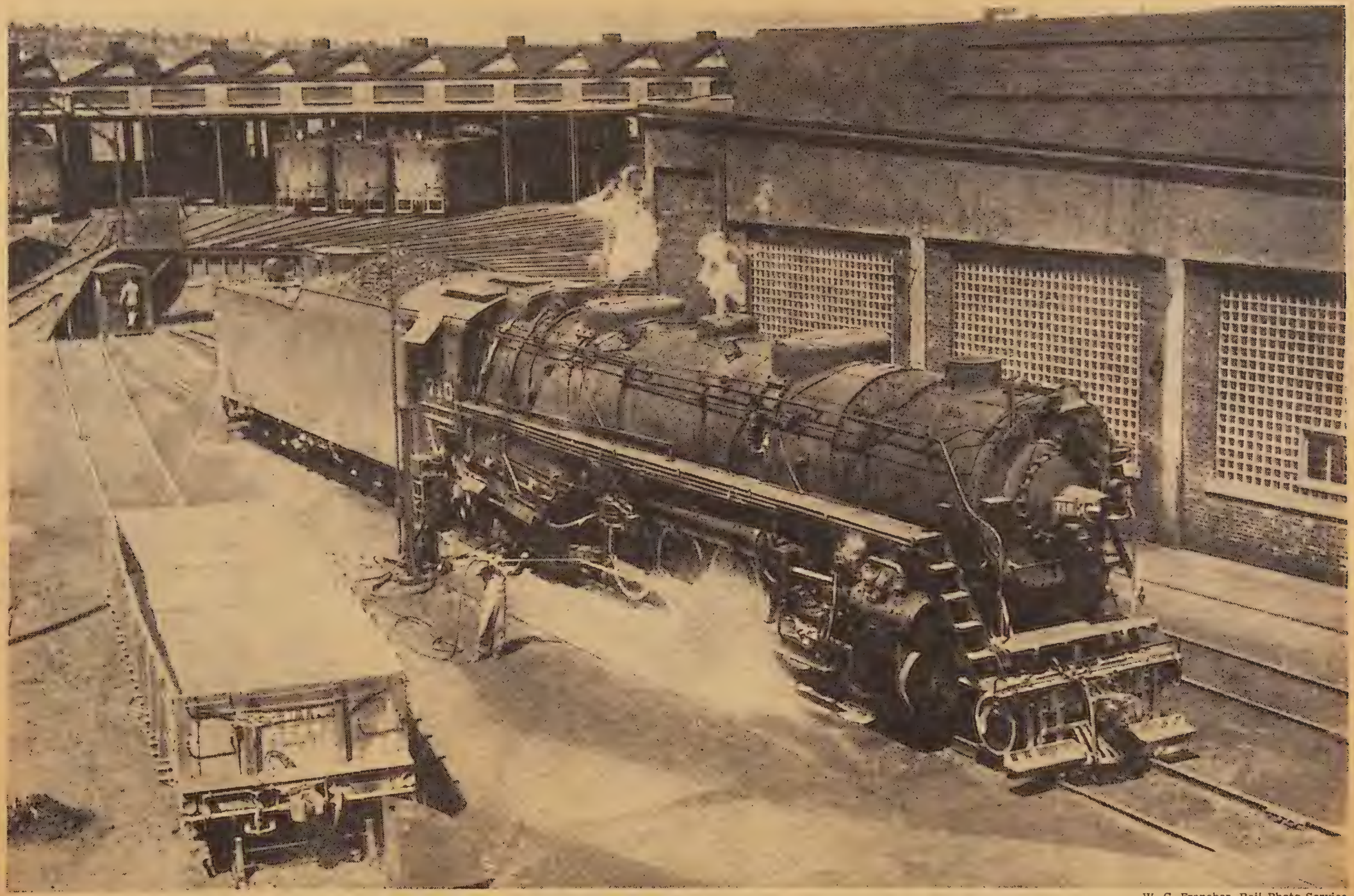


Clerk W. Drexler has prepared from teletyped instructions a list of how many cars he should release in each cut.

Cars rolling off hump through four retarders are slowed to safe coupling speed (four miles per hour or less) after speed and weight have been computed.

Scanner H. Balaban uses tape recorder to read off numbers of passing cars.

Car Inspector G. Polzot demonstrates another safe and efficient device as he couples air hoses with long-handled irons.



W. G. Francher, Rail Photo Service

Duluth, Missabe & Iron Range No. 710 gets a wash after road service in iron ore. Loco was formerly owned by Bessemer & Lake Erie, now completely dieselized.

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here every issue by our research expert—as many as space permits. Top priority is given to subjects that seem to be of wide general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.

1

Question: *Can a railroad company legally refuse to transport a circus?*

Answer: Yes. In a few cases roads have refused. ICC rulings state: "A railroad is not required, as a common carrier, to transport a circus train, a part of which is loaded with animals, over its line, but may refuse to transport such a train, except under a special contract limiting its liability to that assumed by a private carrier.

A carrier is under no common-law obligation to furnish motive power and servants to move a circus company's train over its road at reduced rates. A special contract between a carrier and a circus company for reduced rates and exemption from liability for claims and damages on account of accident or injury from the carrier's negligence is not contrary to public policy."

E. H. DeGroot, Jr., a retired Chicago & Eastern Illinois official, comments, "I never liked circus trains for the reason that in case of accident the countryside might become an undesirable zoo."

2 *Is the Duluth, Missabe & Iron Range dieselized?*

No. This 569-mile road has 169 locomotives, only 15 of which are diesel-electrics. Incidentally, the road owns 15,121 freight cars, 19 passenger, and 191 miscellaneous.

3 *Will the Chicago & Northwestern and the Milwaukee Road merge?*

Nobody knows yet. For more than a year both roads have been considering such a step. They made a preliminary survey. A second and more intensive survey is likely. If the 10,641-mile Milwaukee, with 708 locomotives, should actually join the 7,873-mile C&NW, with 781 locomotives, the result would eclipse in size every railroad system on the continent except the Canadian National (23,312 miles, 2,784 locomotives).

But before that could happen, the project would have to be approved by the directors and stockholders of both roads, the ICC, and certain courts. History shows that many a proposed merger failed to cross one or more of those hurdles. About ten years ago, for example, the prospects were bright for merger of the Gulf, Mobile & Ohio and the Frisco, but the deal never went through.

4 *Where can I get a set of Nathan 5-tone air chime horns, such as those used on E.M. locomotives?*

Nathan Mfg. Co., 45-02 Ditmars Blvd., Long Island City, N. Y., sells Type P for $145, Type M for $160.

5 *What's this I hear about a locomotive with a hydraulic transmission and diesel-mechanical power plant?*

You heard right. She is the first of her kind to be built in North America, and is being tested at Ft. Eustis, Va., by the U. S. Army Transportation Corps. Army officials consider her ideal for overseas use in event of future emergencies because the power transmission system can be removed and replaced in one speedy operation, and she can be run by the average GI.

6 *Is it true that the first rail link between the U.S. and Canada was Canadian National's present line between Portland and Montreal?*

Yes. First the Champlain & St. Lawrence completed a line from St. Johns, Que., to Rouses Point, N. Y., on August 26, 1851. The next year the Lake St. Louis & Province laid rails from Caughnawage to Moers Junction, but this stretch was later abandoned. The present line between Longueuil, Que., and Portland, Me., was built by the Atlantic & St. Lawrence and the Atlantic Railway from Montreal to Island Pond, Vt. The last section completed was from Sherbrooke, Que., to Island Pond on July 18, 1853.

7 *Does the Delaware & Hudson have any steam locomotives left?*

No. All have been scrapped. No. 300, the last D&H steamer used in passenger service made her final run between Albany and Montreal on July 22, 1953. The line owns 179 diesels.

8 *Is it true that the Boston & Maine will run a Talgo type train?*

Thomas Biddy

End of track on the Florida East Coast Railway. Picture taken 396 miles south of Jacksonville, Fla., shows southernmost rail line in the U.S.A.

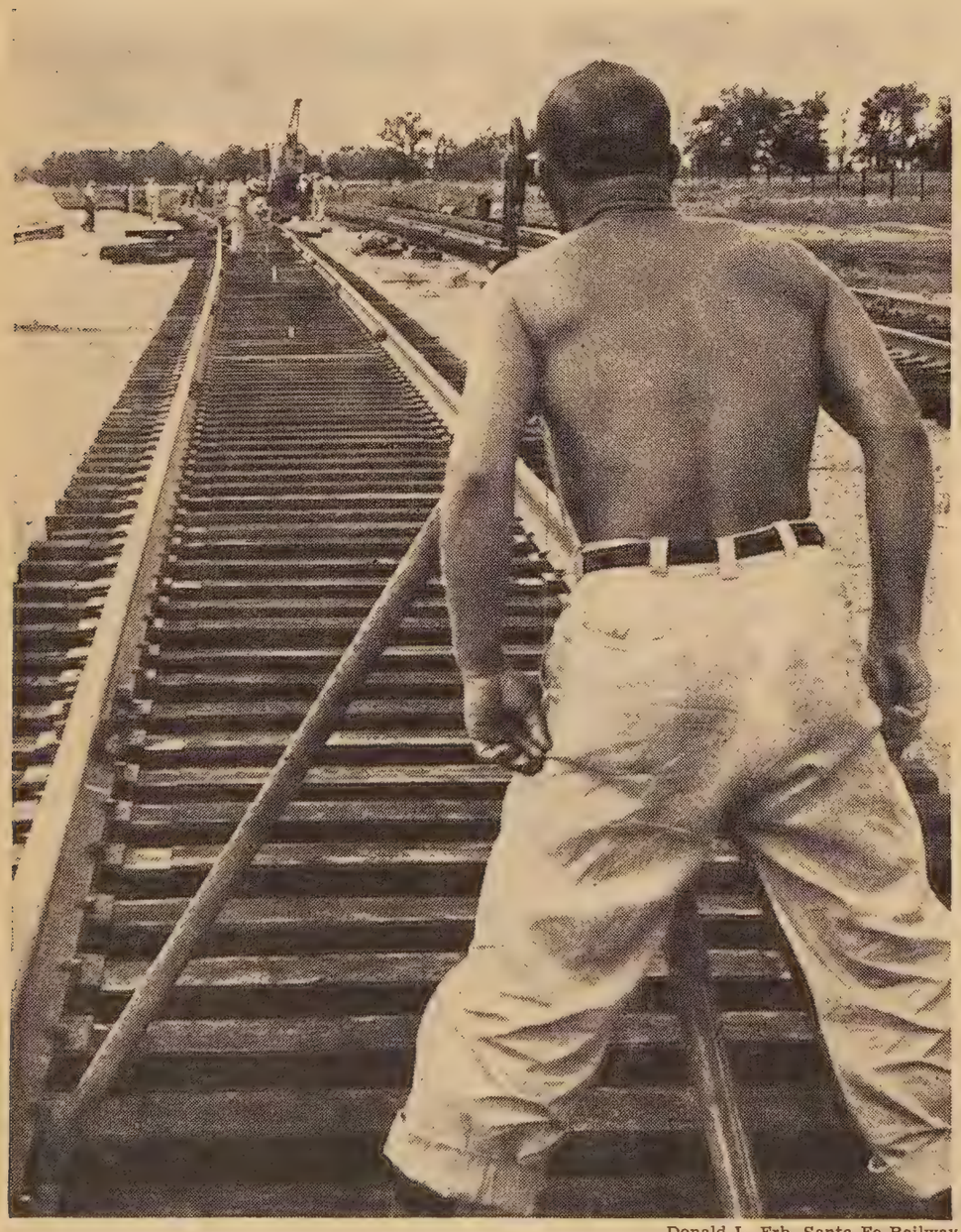
Yes. This summer such a train, built by American Car & Foundry, will be delivered to the B&M and put on the Boston-Portland run. It will have the latest comfort and safety features. Because of the low center of gravity it will take curves safely at high speeds, thus reducing running time.

9 *Just what is a Speedwalk?*

The Speedwalk is a conveyor-belt system for moving masses of people safely and inexpensively. One such device was installed at the Erie's Jersey City passenger station. Since then Hudson & Manhattan passenger traffic has increased 4.57 percent in 14 months.

10 *(a) What is the distance from the floor of a boxcar to the top of the rail, and why is this particular measurement used? (b) Is it true that railroad standard gage can be traced back to the ancient Roman chariots?*

(a) The height of a standard boxcar varies. One widely used type, for example, is 13 feet 11 inches to top of rails. This allows clearance for bridges and tunnels. (b) Yes, 4 feet 8½ inches was the width between the wheels of the old chariots. When the Romans occupied England they adopted the same gage for the little push carts they used in coal mines. Centuries later, when common-carrier railroads were built in England, the gage became standard for that country. It has since been adopted by the United States and several other countries.



Donald L. Erb, Santa Fe Railway

Setting center line of track with transit on 49-mile stretch of Santa Fe's new direct line into Dallas. Project represents the largest railroad-building job into a major city of Texas in 20 years. It was completed in December.

11 *Did George Westinghouse invent anything besides the air brake?*

Yes. Westinghouse was a prolific inventor, with more than 400 patents to his credit when he died in 1914. He invented, among other things, an automatic railroad signal device, shock-absorbing systems to minimize damage when two railroad cars are brought together for coupling, and a motor for trolley cars. He was also instrumental in lighting Buffalo, the first American city to use alternating current. A bust of him is being added to those of other great Americans in New York University's Hall of Fame.

12 *How do trap cars operate?*

Trap-car service moves both ways. A plant or warehouse may have the car hauled to a station to get its contents "broken up" and sorted into LCL merchandise for shipment or delivery to final destinations.

Conversely, an agent receiving sufficient LCL freight (6000 pounds or more) for a single concern may have it loaded into a car to be switched to the consignee's siding.

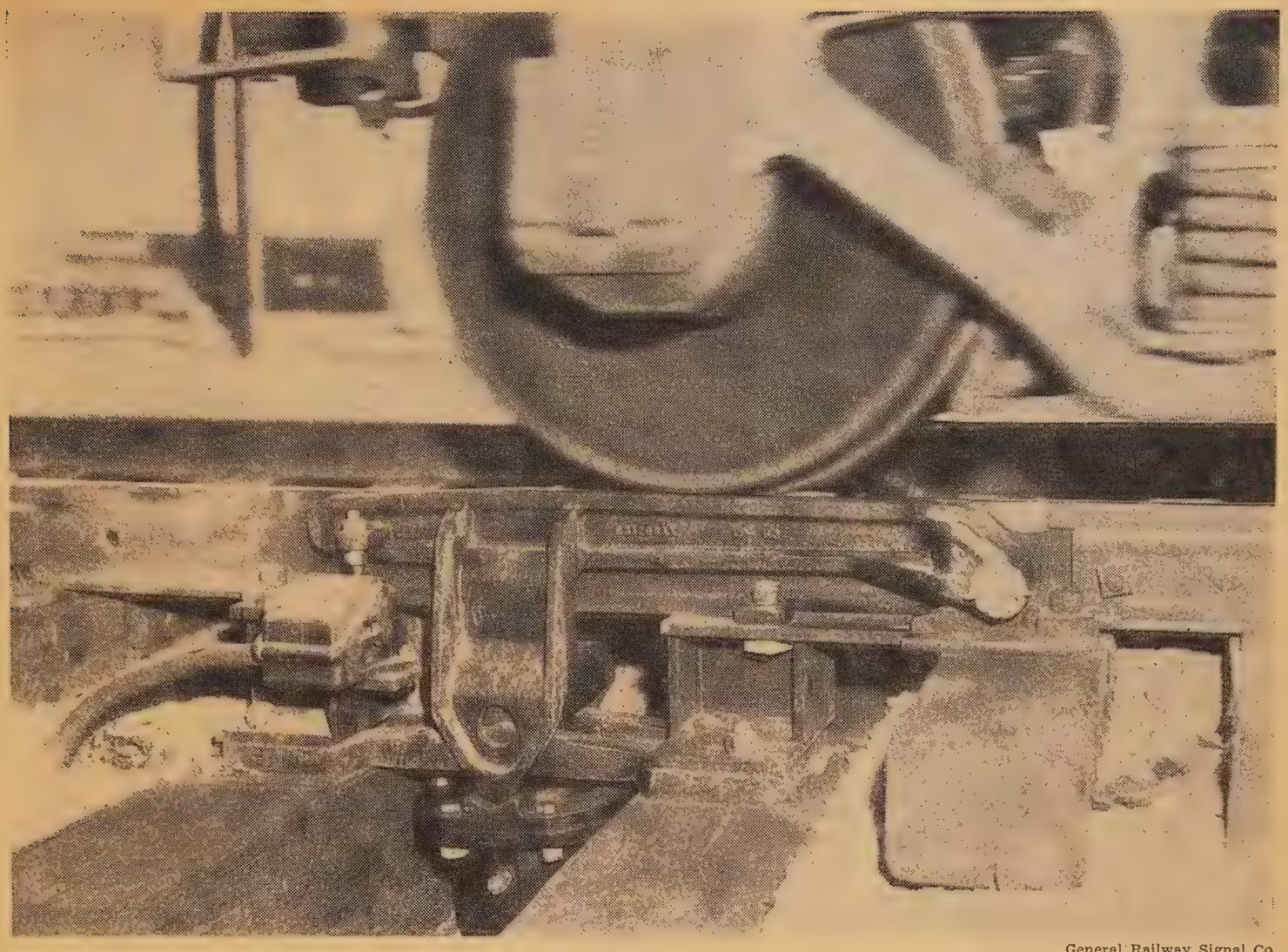
Trap cars from station to consignee are, with rare exceptions, local jobs, made up by the agent at the final destination. It is not unusual for one to be loaded by a shipper and run several hundred miles (and over different roads) before being broken up.

13 *What's this I hear about the Virginian's new type of electric power?*

Electric locomotives with electronic tubes will soon replace the original split-phase electrics on the Virginian's tracks. Power taken from an overhead wire will be fed into rectifier tubes which convert a-c to d-c for the traction motors. These tubes are similar in function to rectifier tubes used in radio and TV sets for the same conversion. The Virginian's new locomotives are somewhat similar to those used on the New Haven for high-speed service.

14 *(a) When was the last steam locomotive used on the Chicago & Eastern Illinois? (b) When did the C&EI have commuter service?*

(a) The C&EI's last steamer was No. 1944, used as a switch engine at Vincennes, Ind., on May 5, 1950. She was moved dead in a train to Oak Lawn, Ill.,



General Railway Signal Co.

As freight cars roll from crest of "hump," wheels run over automatic arm for weight classification—light, medium, heavy. Information is transferred to retarder tower to determine how much car should be slowed down.

for scrapping. (b) C&EI commutation traffic began about 1879 and gradually faded out. The line retained the right to suburban traffic but let other carriers lease its track for that purpose. Today the C&EI does not consider itself a suburban carrier *per se*, although it sells 10-trip tickets, since special trains are not keyed to accommodate the morning and evening rushes.

15 *Is any freight yard completely equipped with "yard automation"?*

Yes. The Kirk Yard at Gary, Ind., on the Elgin, Joliet & Western is said to be the first. This yard is distinguished especially by the system for automatic control of car retarders developed by the General Railway Signal Co.

The system has been described as a robot, or mechanical man, with muscles, eyes, and a brain, because it hefts each car to see how heavy it is, watches each car to see how it rolls, figures out how fast each car should go for its weight and rollability, and then controls speeds so that cars are handled efficiently and safely.

16 *Did Eddie Rickenbacker ever work for a railroad?*

Yes, the flying ace of World War I was once employed as a Pennsy carbuilder's helper at Columbus, O. He is now chairman of the board of Eastern Airlines, one of the railroads' big competitors.

17 *Who built the first successful electric locomotive?*

Thomas A. Edison. He operated her on a private railway between his laboratory at Menlo Park and Plainfield, N. J., a distance of three miles.

18 *When and where was the first refrigerator car used?*

1851. An enterprising dairyman in northern New York State erected bins on either end of an ordinary boxcar, filled them with butter, and sent them to the Boston market. The butter arrived in first-class condition.

19 *When and where were steel-frame passenger cars first used in the U.S.A.?*

On the Illinois Central at Chicago, Sept. 2, 1903.

20 *Were diesel locomotives used before World War I?*

Yes, indeed. As early as 1910 the Dan Patch Electric Lines operated 130 miles by internal-combustion power. This railroad was named for a great pacer, Dan Patch, who had his own private car. In fact, it was the only road ever named for a horse.

21 *Define the expression "join the birds."*

It means jumping from a moving engine or car, usually when a wreck is about to happen. It is a boomer term.

Obstacle course located on spur of East Erie Commercial Railroad is General Electric's riding-quality test track. Uneven spots simulate rough track conditions.

22 *A history of the West River Railroad, please.*

In 1867 this road was granted a charter to build from Brattleboro to Jamaica, Vt., and by 1880 the last rail was laid near the northern terminus, South Londonderry, Vt. Railroad fever was then spreading over the entire nation. Every town wanted a railroad. When private capital could not be obtained, the West River promoters tapped municipal treasuries along the route. To cut construction costs they adopted a three-foot gage.

High spot of the first year was hauling passengers to the Brattleboro Fair. But as the years passed, there was less reason to use it. The road lost money, and abandonment came in 1939.

23 *I read somewhere about a locomotive obstacle course at Erie, Pa. Just what did the writer mean?*

A locomotive obstacle course at Erie, slightly less than a half mile long, might be the roughest track conditions any locomotive will have to face in actual service.

The "course" is the General Electric's riding-quality test track and is located on a spur of the East Erie Commercial Railroad. It enables the Company's Locomotive and Car Equipment Department to study locomotive reaction to various types of abnormal track conditions.

One set of rails 819 feet long simulates staggered low rail joints with a difference of three-fourths inch between the high and low points. A second section has a 1½ inch difference between the high and low points of the rail.

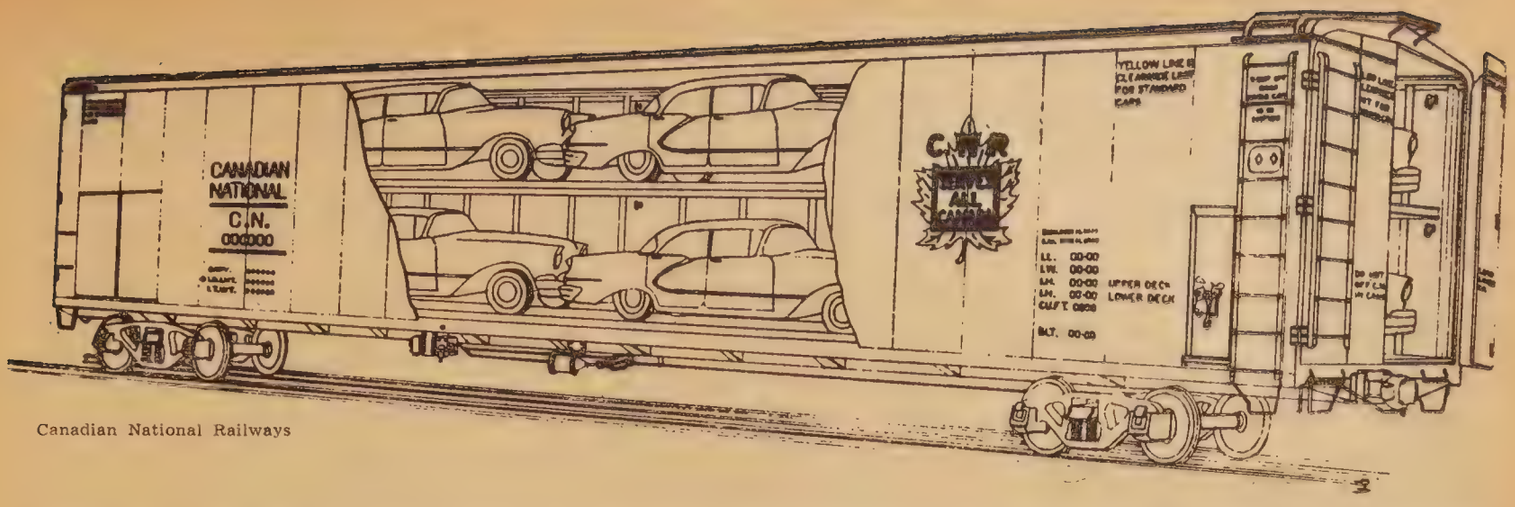
A third set has a three-fourths-inch lateral wave in rail length for a total distance of 819 feet followed, after a space of 936 feet of each straight level track, by the last section where the lateral wave amplitude is increased to 1½ inches.

The effects noted on locomotives tested by General Electric to date have resulted in corrective measures for units that are to be used on particularly rough track.

24 *How big are the largest welded tank cars?*

Canadian Pacific Railway

Canadian Pacific's gas-electric car No. 47 has overall length of 72 feet and seating capacity of fifty.



Canadian National Railways

First car of its type in North America, a new double-deck, all-steel carrier holding eight automobiles, is the largest freight unit in Canadian National service. Decks are equipped with the latest shock absorbing "hold-down" devices.

The largest type of welded tank car yet built has a capacity of 19,200 gallons. However, American Car & Foundry has an order from Erie Mining Co. to build six mammoth 22,000 gallon capacity railroad cars for carrying oil.

25 *Is there an Indian Hill & Iron Range Railroad?*

Yes, it's an industrial road, and folks out Chicago way have some affection for it. The line's pride, No. 7296, a former Baltimore & Ohio Chicago Terminal locomotive, bears the automobile license number of Mrs. Bairstow, wife of the company's president.

The IH&IR was born of a motor truck and clam-bucket crane, with a steel mill for a godfather. For years the H. Bairstow Co. has been disposing of slag and refuse for the U. S. Steel Corp. at South Chicago. The job was done originally by a cumbersome system of unloading hopper and gondola cars with a clam-bucket and hauling the material by motor truck to dumping grounds.

26 *What is a container car?*

It's a railroad freight car with sides and overhead bars that lock its complement of 28 rectangular aluminum containers in place. Each container is designed for easy movement into place via a one-man fork-lift truck. Containers can be filled either on or off the car through an opening in the top. The first road to use such cars was the Pennsy.

27 *Is anything being done toward building an atomic locomotive?*

Not yet, but the latest developments in atomic research are being closely watched by motive-power experts.

28 *Give us a description of Canadian Pacific gasoline-electric car No. 9004.*

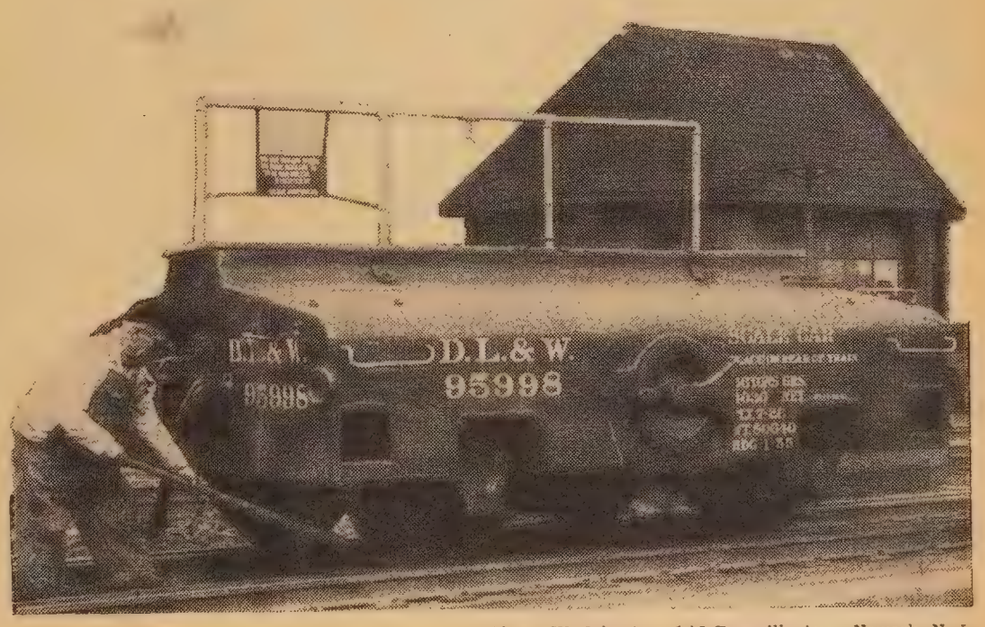
Built in 1930, this car has an over-all length of 72 feet and a seating capacity of 50 passengers. It is driven by a gasoline engine, d-c electric generator, and two electric motors. Two fuel tanks, each containing 180 gallons of gasoline, give it a range of 480 miles at an average speed of 30 mph., maximum speed from 60 to 65. It weighs 139,000 pounds and can haul a 50-ton first-class coach.

29 *What are track scales used for?*

To weigh cars and their contents, and charge accordingly. A ticket is stamped showing the gross weight (car and its freight) and the tare (the empty car), which is subtracted from the gross to give the net weight. Net weight is the basis on which the shipper is charged.

30 *How are automobiles shipped by rail?*

By a double-deck car built by Canadian Car & Foundry for the Canadian National Railways. This car, the first of its kind in railway service, is 16½ feet high, 10 feet, 8 inches wide and 78 feet long—34 feet longer than an ordinary boxcar. It holds eight automobiles, each weighing as much as 4,600 pounds, on two decks equipped with shock absorbing devices.



Almon W. Johnston, 140 Roseville Ave., Newark, N. J.

Scale at Harrison, N. J., is checked with test car for weight of car and contents.

RUNNING EXTRA

MARVIN COHEN, 930 Winthrop St., Brooklyn, N. Y., is curious about the remains of a turntable located a few yards down the track from the Flemington, N. J., station. Who can supply details?

EDWARD NELSON, Lisbon, N. Y., writes: "You say (in Dec. issue) the DL-700 is the Montreal version of the American DL-600 and has 2660 hp. I thought she was the Montreal version of the Alco 1600 hp. road switcher RS-3. The DL-600 has a six-wheel truck and a 2250 hp. engine, type C-C wheel arrangement, while the DL-700 is merely a revamped B-B type 1600 hp. road switcher with a high hook."

INFORMATION regarding the world's first steel car—on New York's Interborough Rapid Transit system—comes from Sy Reich, 92 St. Marks Place, New York City. He says that a book the IRT put out in 1904 carries a line-drawing of No. 3354, which is described as "the first steel car," although the car itself had not been built then. Actually, the first all-steel car (experimental) was No. 3342, built by the Pennsylvania Railroad for the IRT at its Altoona shops Dec. 10, 1903.

COMMENTING ON question 30 in our December department, Norvel C. Parker, 55 Irving St., West Springfield, Mass., writes: "I believe the air-brake pressure of diesels is 80 pounds, but they also have a higher pressure line of at least 100 pounds. I know that the 80-pound brake pressure will blow one of the largest six-toned whistles that the New York Central has on its steam engines. I think the best air whistle made for diesels is the Hancock 4700, which sounds like a steam engine whistle."

SAYS LT. W. A. HARVEY, U. S. Army, 117 Charles St., Ft. Eustis, Va.: "I noticed the Union Pacific's 'Big Boy' was challenged with respect to its brute power. The *Locomotive Cyclopedia* gives the following data: Norfolk & Western 2-8-8-2, Compound Mallet articulated loco, Class Y-66, built by the N&W, exerts 152,206 pounds when running simple, and 126,838 pounds when running compound. This type carries approximately 89 percent of the engine weight (582,900 pounds) on the drivers, while the UP Big Boys (total 772,000 pounds) carry 71 percent on the drivers. The Big Boys' speed comes from her 68-inch drivers, while the N&W Y-6 is built for heavy mountain work at speeds of 20 to 33 mph with her 58-inch drivers."

DOUBT exists as to the reason for the naming of the town of Tenino, Wash. James Hickey, Box 745, Echo, Ore., states: "I thought it was named after a surveyor's stake, adjacent to the present town site, bearing the legend 'T-9-0.' "

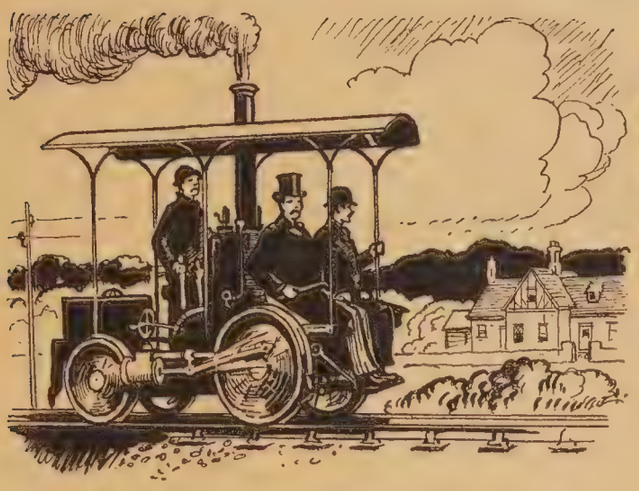
L. L. Perrin, the Northern Pacific's publicity man, cites other versions. One reports the town was named for a locomotive numbered 1090; another that it got its name from being located at Survey Station 1090; and still another has the word *Tenino* coming from the Chinook jargon, meaning junction. ●

Chicago & North Western Railway

At long last, Chicago & North Western is naming not only one train but two (a freight and a passenger) for 16-year-old Kate Shelley, who became nationally famous for her courage in crossing a bridge over a dangerously flooded river in a storm to save a limited full of passengers in 1881. Here is the *Kate Shelley*, freight train No. 249, leaving Proviso Yards.

Along the Iron Pike

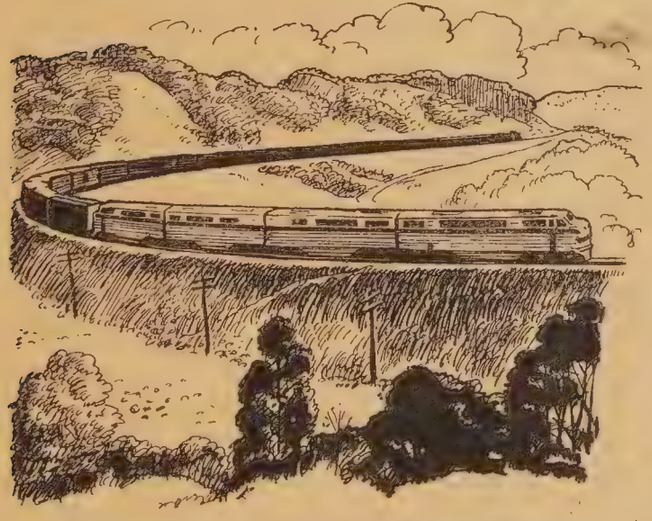
by Joe Easley



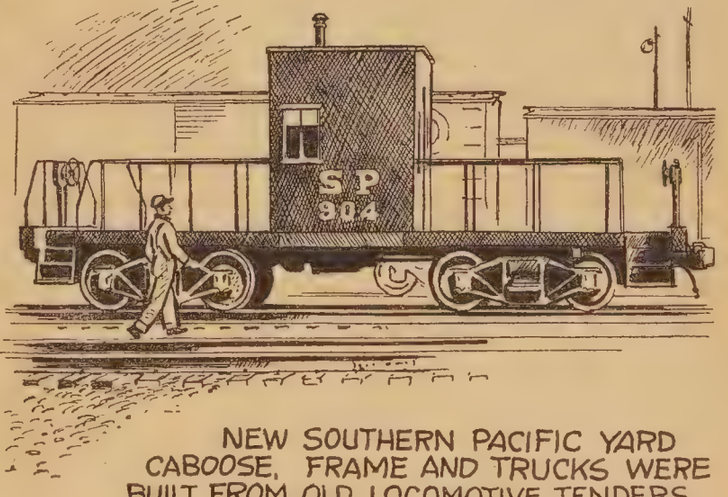
JOLLY RIDE ON INSPECTOR'S CAR BUILT IN 1886 BY MERRYWEATHER & SONS, LONDON, ENGLAND, FAMOUS BUILDERS OF STEAM TRAMWAY LOCOMOTIVES. (*Adapted from photo in The Fireman, Greenwich, England.*)

WORLD'S STEEPEST RAILWAY? ABANDONED LOGGING ROAD 3/4 MILE LONG, WEST OF TIMBER, ORE., IS SAID TO HAVE MAXIMUM GRADE OF 78 PERCENT. (*from Fred Wenzel, Rte. 1, Box 123, Clackamas, Ore.*)

CANADIAN PACIFIC WRECK AT AZILDA, ONTARIO, SEPT. 12, 1906. WHO CAN SUPPLY DETAILS? (*from F. O. Ellis, Kitchener, Ont., Canada.*)



THE PENNSY ISN'T THE ONLY ROAD WITH A HORSESHOE CURVE. THIS ONE IS ON THE BURLINGTON NEAR CRAWFORD, NEB.



NEW SOUTHERN PACIFIC YARD CABOOSE. FRAME AND TRUCKS WERE BUILT FROM OLD LOCOMOTIVE TENDERS. (*from P. Hervey Angier, SP hogger, 143 Roselawn Pl., Los Angeles, Calif.*)

Mrs. Nicholas Morant

White Pass & Yukon freight emerging from Tunnel Mountain near the pass from which the railway derived its name. This fabulous route carried some 2,000 tons of war supplies daily during World War II.

THE

The Narrow-Gage White Pass

by P. C. GRAVES

ONE OF North America's few remaining narrow-gage lines is the fabulous White Pass & Yukon Route, running between tidewater at Skagway, Alaska, and the headwaters of the Yukon River at White Horse, Canada. Completed in July, 1900, it climbs for 110 miles of forbidding mountain grades of bare gray rock and is still powered mostly by steam.

From sea level at Skagway the road ascends 2885 feet to White Pass in twenty miles, over a ruling grade of 3.75 percent, with many curves up to 20 degrees. The highest elevation is reached at Log Cabin, B. C., 2916 feet above sea level.

At that point the grade drops 760 feet to Bennett, and the road then follows the winding shores of Lake Bennett for 27 miles, to Carcross, Y.T. —so named because it used to be a favorite spot for great herds of caribou to cross—and thence to White Horse, 110 miles from Skagway.

The railroad was built as a result of the famous gold rush of 1897-'98, and that started when George Carmacks and two Indians, Skookum Joe and Tagish Charlie, found large deposits of placer gold on Bonanza Creek, a tributary of the Klondike River.

The WP&Y was the first railroad to operate in Alaska, its purpose being to give the Yukon an outlet at Skagway. This was the Skagway that grew overnight from a sprawling settlement of a few shacks to a city of 15,000 when the magic word *Klondike* brought more than fifty thousand fortune-seekers to the Canadian Northwest.

Here was the logical spot for beginning a railroad, for prospectors on ships from Seattle and other Pacific ports landed at Skagway to take the dangerous trail inland over the White Pass—the shortest distance from the ocean to the gold country.

At that time the region boasted only

GOLD RUSH ROUTE

& Yukon, with a Great Historic Background, Serves the Canadian Northwest and Alaska

Numbers 61, 62, and 70, typical of the sturdy and dependable power on this line in the Far North.

a wagon road that was slow, dangerous, and outmoded.

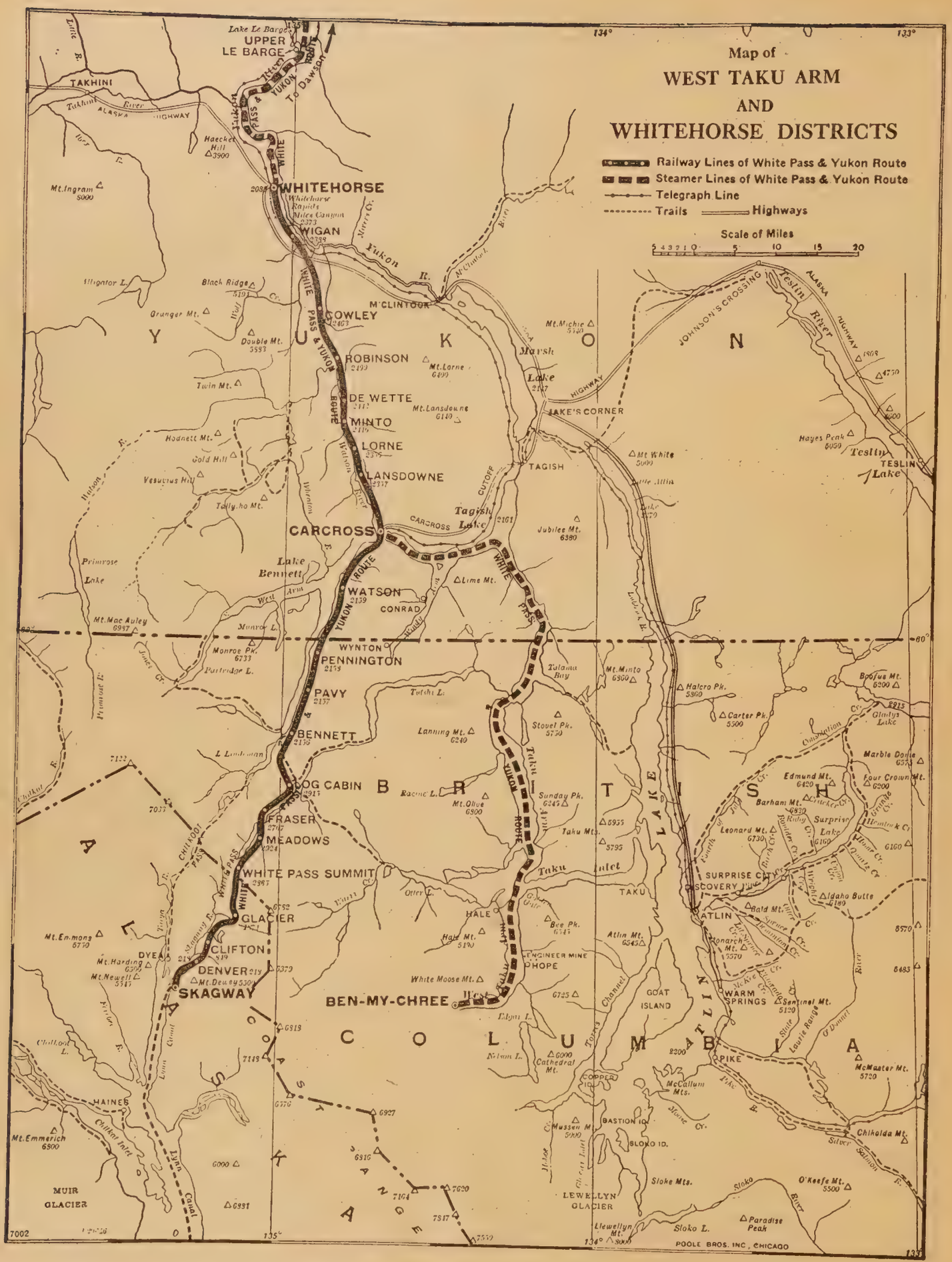
The WP&Y was organized in the spring of 1898. Men and materials were landed at Skagway in May of that year and construction of the three-foot-gage route was started at once. Building the railroad, which practically paralleled the old highway, proved to be a hazardous job. Men blasted a road bed out of solid rock on mountainsides so steep that in many instances they had to be suspended on ropes while cutting a grade. Costs ran high, not only in money but also in human life.

Those were turbulent times and the lust for gold prompted outlaws like "Soapy" Smith and his gang to rob and kill prospectors and railroaders alike.

Progress on building the WP&Y was erratic because news of fresh gold strikes made the men restless. One day a returning miner told of finding the precious metal in nearby Atlin County. Thereupon 1,500 railroad builders drew their pay and started off for the new "Eldorado," leaving only 700 to carry on the construction.

The laborers who departed did not lay down their tools but took them along to aid in gold-digging, which made it necessary for the men in charge of the railroad building to find new picks and shovels as well as new crews.

But finally, despite many setbacks, the last rail was laid at White Horse, the northern terminus, in 1900. Even before that date the investment is said to have paid its ten-million-dollar ini-



Here is a trip the narrow-gage railfan won't want to miss, and soon, while the road is run largely by steam.

tial cost by carrying prospectors and their equipment at a dollar a pound.

And what a railroad! If you are a narrow-gage fan you surely want to ride it. When your train pulls out of Skagway, it climbs a bold rock wall. Looking far ahead, you can trace the tiny steel ribbons of tracks which seem to run at an incredibly crazy angle. Down below you see the remains of the old pack trail, with a scattering of weatherbeaten sticks to mark the places where daring men perished.

All the way up to White Horse you are reminded of the dangers encountered by men infected with a virus —the deadly urge for gold. At Dead Horse Gulch the train crosses a cantilever bridge 215 feet in the air—the most northerly bridge of its kind in the world—and from this dizzy height you look into a sheer drop, where, in 1897, some five thousand dead horses were counted!

But the rigors of the past are pushed aside by the scenic beauty surrounding you on all sides, in a magnificent land where nature has marshalled all her forces to carve a dramatic landscape.

Always ascending, the train passes under an overhanging granite ledge, which forms a backdrop for a series of waterfalls spilling from blue-white glaciers far off in the distance.

Of great interest is Tunnel Mountain, cut from solid granite a thousand feet above Glacier Gorge. At Inspiration Point, 2,400 feet above sea level, you behold a panorama superb beyond description.

Later, at White Pass Summit, your train crosses the International Boundary at an elevation of 2,900 feet, where the Stars and Stripes float alongside the Union Jack. Regardless of whether you live in the States or Canada, the sight of these two flags in the wilderness, whipped by the breeze, is a real thrill.

The rails skirt the shores of sky-blue Lake Bennett for twenty-six beautiful miles and pass the ghost town of Bennett, where once ten thousand get-rich-quickers lived during the gold fever. It was here they camped and built scows, rafts, and boats of all kinds to continue the journey to Dawson by water.

An unforgettable landmark is Miles Canyon, where the current swirls between almost perpendicular granite walls and plunges into a whirlpool more than two hundred yards in diameter. Many stories are told of prospectors shooting the treacherous five miles between Miles Canyon and White Horse Rapids with "the fear of death for a pilot."

Actually, so many lives were lost that the Royal Northwest Mounted Police eventually appointed pilots and stopped all boats that were not properly guided. The Mounties added luster to their great reputation by handling the hurrying mass of humanity that struggled toward Dawson.

From its outset the White Pass & Yukon Route operated solely by steam power. Then, about a year ago, it put two diesel-electrics into service. This change was important in a country

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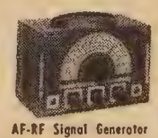
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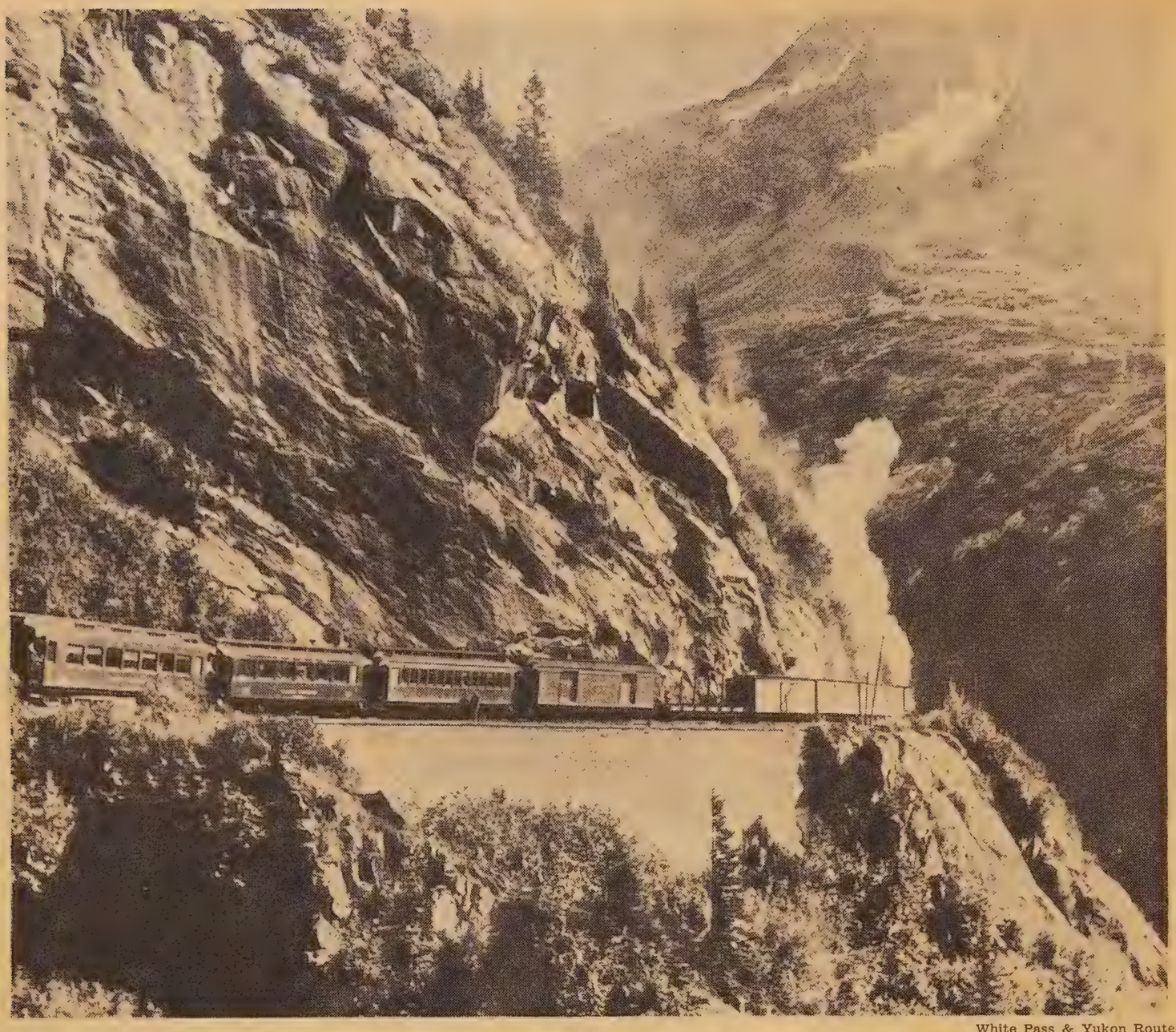

White Pass & Yukon Route

Railfans' paradise: mixed train of the narrow-gage White Pass & Yukon Route rounds a curve on Summit Mountain.

where temperatures range from 80 degrees above zero in summer to 65 below in winter. The box cab enables the fireman to reach all power-plant and control apparatus without facing winter's icy blasts.

Each 80-ton diesel-electric can haul a load of about 260 tons, compared with 160 tons pulled by the average WP&Y steamer.

White Pass Summit has a total annual snowfall of between 30 and 40 feet, which, coupled with heavy grades and curves, makes this one of the most difficult operations to be found anywhere. Before the diesels arrived, the largest steam engine had a gross tonnage rating of 160 tons on the "Big Hill" and it was considered a major feat to get 450 tons to White Pass with two helpers cut in the train.

The built-in plow and front end design of the diesels have proven well adapted to snow service. On several occasions they have plowed their way home without benefit of rotary-snowplow service, through snow-filled cuts that would have completely stalled a steam engine.

Usually, however, a rotary plow must precede even a diesel-powered train in winter and must be run close enough to be visible, because the mammoth drifts can obliterate a moving object in a matter of seconds. The two-story station at White Pass Summit has been known literally to become part of a mountain of white.

The diesels are a far cry from the gallant steamers used in the early days, steamers such as the *Duchess,* built in France for construction work on the Panama Canal and then shipped from the tropics to the frozen North.

During World War II the U.S. 770th Railroad Battalion operated the White Pass and Yukon, which was then hauling supplies for the gargantuan job of building the Alcan Highway. They used old engines dug up from scrap piles and patched them together, because equipment was scarce, even for essential industry—and few industries were as important as the railroad at this crisis in the world's history.

While the Japanese were advancing up the Aleutians, island by island, the narrow-gage railway defiantly increased its tonnage. Operations con-

tinued during one of the coldest winters on record, and the GIs did something the old sourdoughs said was crazy—they kept the trains worming over the tortuous pass all that long, terrible winter.

Until then the line had regularly hibernated from fall to spring. However, the boys of the 770th hauled the freight, come hell or high snows. They called it the toughest assignment they'd ever had and they talked about the railway in disparaging terms. They called it "The Glacier Special," "Old Icy," and names that wouldn't bear printing. But to a man they loved the rough, tough, sturdy little line, which once again in its half century of operation served an historic purpose.

White Horse is located on the Alcan Highway and is the site of a large air base, as well as a busy mining center. The principal business of the railway, known as the "Gateway to the Yukon," consists of mining supplies and machinery, general freight, and construction materials for the Yukon. Southbound, the haul consists of many thousands of tons of lead and zinc concentrates and asbestos fiber.

There is also a thriving tourist business in summer months, and the road has eighteen parlor cars, with large windows and comfortable individual seats.

The line has but eight steam locomotives left in service: four of Class 70, two of Class 80, and two of Class 190.

All others have been sold, scrapped or otherwise disposed of.

"We are continually receiving inquiries from fan clubs and hobbyists as to the disposition of some of these engines," says J. C. Hoyt, superintendent of the WP&Y Rail Division, Skagway, "and full information on this subject is available if desired.

"Our two new Class 90 diesels have proven so successful that we plan to buy several more in the near future, to fully dieselize the operation."

Fans who desire to travel the narrow-gage line while it is still mostly steam-powered had better do so this summer at the latest. You can never say you have seen Canada or Alaska until you have covered the narrow-gage Gold Rush Route.

(WP&Y loco roster, page 68)

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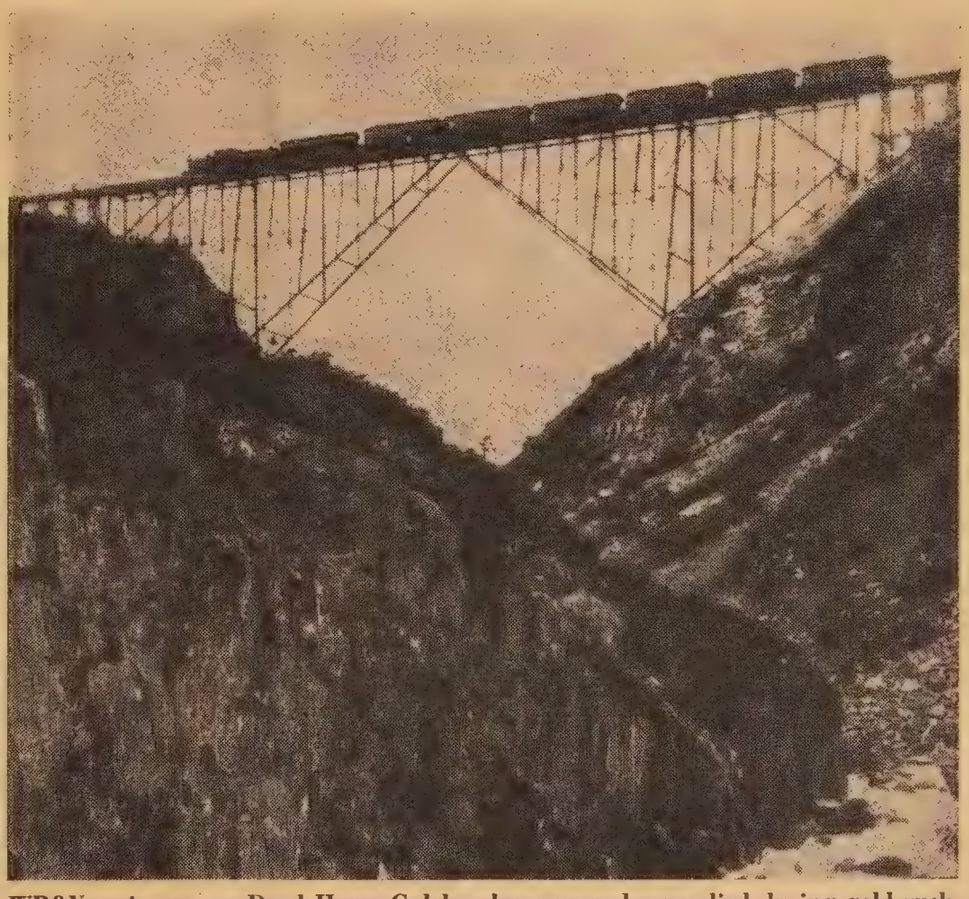

WP&Y train crosses Dead Horse Gulch, where many horses died during gold rush.

Steve Maguire, 802 Tenth Ave., Belmar, N. J.

Electroliner of Chicago, North Shore & Milwaukee making one of several street stops in Milwaukee en route to terminal.

STREET AND INTERURBAN RAILWAYS OF 1956

by STEVE MAGUIRE

IN THE THREE years since our last listing of electric lines in North America, the trend to bus substitution and abandonments has continued. The only recent developments in favor of juice lines are in the rapid transit field. Boston and Toronto and Cleveland have opened fast transit lines that are operating successfully. Elsewhere, more and more consideration is being given to fast transit routes in future urban planning.

But for trolleys and interurbans the story is not so happy. Streetcar lines are no longer being built. Instead, most of those remaining are slowly being cut down, route by route. In the past three years fourteen trolley systems have been abandoned entirely, while ten interurban lines have given up their passenger traffic, and several more are in danger of doing the same.

In response to many requests, we present a current listing of operating passenger and interurban lines in North America—and Central America, too, since none are left there. We have included routes which, in many respects, do the work of the old streetcars but on a faster and more efficient scale.

Not included are heavy steam-road electrifications nor former passenger-carrying juice lines that continue to haul freight electrically. In most instances, the juice-freight period is short-lived and soon converts to diesel.

What of the future? Unfortunately, not many of the remaining electric lines are free from plans for abandonment or conversion to buses. Rapid transit lines are coming right along, but interurbans and city trolleys are on the way out.

The three interurban lines into Chicago—the CNS&M, the CA&E, and the CSS&SB—may last well into the 1960's. Their close connections with downtown Chicago allow them to give a fast service almost in rapid-transit style. The Norristown line of Philadelphia Suburban may last indefinitely.

In Canada there are possibly two interurbans that may have some future. The Canadian National-owned route from Quebec to St. Anne's will endure as an electric as long as the owner-road desires. And the Niagara, St. Catharines & Toronto route from Thorold, Ont., to Port Colbourne must continue until some way is found to relieve the franchise obligation that passenger service continues as long as freights are run. This is another CNR-owned route and depends somewhat on decisions of the parent steam road.

For streetcars not of the rapid transit-type service, the future is dismal. The following lines *may* continue to operate for some time into the future: Boston, Key System, San Francisco (and this with crossed fingers), Philadelphia, Pittsburgh (only because of its size and we may well be wrong on this if National City Lines gets control), and El Paso, Texas (since the company has a fear that if bussed, drivers might keep on going south into Mexico City), and finally the Toronto system.

Perhaps at a later date we will list the electrically-operated freight lines, but for the present here are all of the streetcar and interurban lines left in our hemisphere, from the North Pole as far south as Brazil. Name, location, and track mileage are included.

UNITED STATES

California

Key System Transit Lines, Oakland, 62 miles
Los Angeles Transit Lines, 175 miles
Municipal Ry. of San Francisco, 114 miles (note a)
Metropolitan Coach Lines, Los Angeles, 44 miles (note b)

District of Columbia

Capital Transit Co., 120 miles

Illinois

Chicago, Aurora & Elgin, 88 miles
Chicago, North Shore & Milwaukee, 200 miles
Chicago, SS&SB (see Indiana)
Chicago Transit Authority: surface, 75; el and subway, 400 miles
Illinois Terminal RR., Springfield, 150 miles

Indiana

Chicago, South Shore & South Bend, Michigan City, 163 miles

Iowa

Waterloo, Cedar Falls & Northern, Waterloo, 128 miles (note g)

Louisiana

New Orleans Public Service, Inc., 26 miles

Maryland

Baltimore Transit Co., 50 miles

Massachusetts

Metropolitan Transit Authority, Boston: surface, 150; el and subway and rapid transit, 80 miles

Michigan

City of Detroit, D.S.R., 50 miles

Missouri

Kansas City Public Service, 80 miles
St. Louis Public Service Co., 140 miles
St. Louis Water Works Ry., 8 miles (note d)

New Jersey

Hudson & Manhattan RR, Jersey City, 20 miles (note e)
Public Service Coordinated Transport, Newark, 10 miles (note e)

New York

New York City Transit System, el & subway 820 miles
Queensboro Bridge Ry, New York, 2 miles
Rochester Transit Corp., 19 miles (notes c and e)
Staten Island Rapid Transit, 50 miles (note e)

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Ohio

Cleveland Transit System, 30 miles (note e)
Shaker Heights Rapid Transit, 26 miles (note e)

Oregon

Portland Traction Co., 40 miles

Pennsylvania

Johnstown Traction Co., 27 miles
Philadelphia Sub'n Transit Co., Llanerch, 89 miles (note f)
Philadelphia Transportation Co., surface 400, el & subway 100 miles
Pittsburgh Railways, 431 miles

Texas

El Paso City Lines, 16 miles

Wisconsin

Milwaukee & Suburban Transport, 60 miles
Wisconsin Elec. Power Co., St. Francis (Milw.), 2 miles (note d)

CANADA

British Columbia

British Columbia Elec. Ry., Vancouver, 40 miles

Ontario

London & Port Stanley Ry., London, 47 miles
Niagara, St. Catharines & Toronto, St. Cath., 25 miles
Ottawa Transportation Comm., 45 miles
Toronto Transportation Comm., 236 miles

Quebec

Canadian National Rys., Quebec, 32 miles
Montreal & Southern Counties Ry., St. Lambert, 25 miles
Montreal Transportation Commission, 200 miles

MEXICO

Electric Transport Service of D.F., Mexico City, 165 miles
Electric Company of Tampico, Tampico, 12 miles
Vera Cruz Cooperative Tramway, Vera Cruz, 20 miles

CUBA

Hershey-Cuban Railway Co., Havana, 80 miles
Matanzas Tramways, Matanzas, 11 miles

NOTES:

a—Includes cable-car operation
b—Formerly Pacific Electric Ry.
c—Abandonment imminent
d—Operated for employees, no fares charged
e—Rapid Transit line
f—Includes Phila. & Western Ry.
g—Interurban weekends only, city car weekdays only

MAIL CAR

(Continued from page 11)

ANSWERING a question from A. J. Franck which appeared in *Railroad Magazine,* Calvin B. Manon, Ambassador Hotel, Kansas City, Mo., says, "Yes."

Mr. Franck wants to know if there is any North American airport from which you can go directly from a plane to a train or vice versa. Says Mr. Manon: "Two railroad main lines skirt our Kansas City Municipal Air Terminal—the Burlington and Wabash—only 100 feet or so from the airport's administration building which houses the waiting rooms, ticket offices, etc. This airport is unusual for other reasons also. It is located almost in the center of a big city and is the only place in U.S.A., so far as I know, where you can see a mail train using a catcher pouch almost in the shadow of a city's downtown skyscrapers."

Turning to misnamed railroads, Mr. Mason states: "The main line of the Atchison, Topeka & Santa Fe doesn't touch any of those three cities, while Atchison and Santa Fe have only branch-line freight service. The St. Louis & San Francisco doesn't come any closer to San Francisco than Ellsworth, Fla., 2,000 miles away. But the prize misnomer is the Kansas City, Mexico & Orient, which doesn't run into Kansas City and doesn't have a foot of line in U.S.A. but operates in Mexico." •

ONE of our shortest railroads, the four-mile Sandersville, is authorized by the ICC to build a six-mile extension from Sandersville, Ga., to serve a projected $3,000,000 clay-processing plant at Griner Place. This would increase the road's mileage 150 percent, comments a former Southern brakeman, Herbert G. Monroe, Villa Rica, Ga., who sent us the news. •

CONGRATULATING us on our February cover, J. D. Aldrich of General Electric, Erie, Pa., adds: "Naturally, we are prejudiced in its favor because it features two of the electric locomotives that the Milwaukee Road bought from us several years ago.

"However, your caption on page 15 of that issue is inaccurate. The two-unit job shown in the picture is one of the original 3000-volt D-C locomotives that GE furnished the Milwaukee Road. They have axle-hung motors with gears mounted directly on the axles. The only quill-type electrics the Milwaukee ever owned were five single-cab passenger units, with a 4-C-2 plus 2-C-4 wheel arrangement, built by Baldwin-Westinghouse.

"The reference to 'Milwaukee Road's 73-mile-long line through the Cascades' also is in error. Your caption writer must have been thinking of the Great Northern's electrification. Actually, the Milwaukee's Cascade electrification extends 216 miles between Othello, Wash., and the Seattle and Tacoma terminals. That road has no plans for dieselizing either this or its 440-mile electrification between Avery, Ida., and Harlowtown, Mont." •

ENGINE pictured in Joe Easley's *Along the Iron Pike* of Dec. '55 is identified by Roy D. Graves, 1201 Moraga St., San Francisco, as narrow-gage Ferries & Cliff House No. 8. •

WE ASKED a Reading Lines official why his company had received the E. H. Harriman Memorial Award for having the year's best overall safety record of all Class I roads in the East.

"The Reading has one outstanding feature that relatively few roads have," he said. "I refer to our school for new trainmen. Candidates for the job are given two days of instruction in the safest way to climb ladders on sides of freight cars, couple cars, apply handbrakes, throw switches, and the like. They also receive a day's training in the yard on the job. All of these things make for safety."

Incidentally, Chicago & Eastern Illinois needs yard firemen ($16.39 a day minimum) and yard switchmen ($18.15). If you want a steady job, see any C &EI general yardmaster. •

RAILROAD MAGAZINE is "well balanced to appeal to every kind of railroad taste," according to Henry Thayer, 153 Ridgeway Rd., Weston, Mass. "Why, then, should the yellow light still be on? Is there any way to step up subscriptions and news-stand sales so you can publish again every month instead of every two months?"

Sure, there are plenty of ways. If every *occasional* buyer of the magazine would buy it regularly, we'd get back on the monthly track in no time at all.

Another idea: If each of our friends would buy one extra copy of *Railroad* every issue and give it to some railroad man who doesn't get it already, we would not only return to a monthly basis very fast but we'd print on better paper and even expand the magazine. •

IF YOU ever visit Lincoln, N. H., you can see two geared locomotives on display at the Clarks' Trained-Bear Ranch, according to G. M. Kidder, RFD 1, South Acton, Mass. One is a Climax, which originally belonged to the Beebe River Lumber Co. of Campton, N. H., and had been in storage since 1928 at the Parker-Young Paper Co. plant in Lincoln. The other is a Shay, used at the paper plant until about three years ago.

The Clark brothers have devoted much time to making badly-needed repairs on these locos. They hope soon to have the Climax operating and steam up on the Shay, and plan to extend their short trackage. They are seeking more old railroad equipment in New England to further their hobby.

Also on public exhibition are Baldwin locomotives 15 and 25 of the Cowlitz, Chehalis & Cascade, which have been given to the cities of Chehalis and Centralia respectively, reports James D. Siegwarth, Rte. 4, Box 77, Chehalis, Wash. The 15 is a Mikado built in 1918; the other is a 2-8-0 of 1920 vintage. •

ANSWER to problem on page 6. In the first order No. 36 was instructed to take siding at Sycamore, but a later order changed merely the meeting point, with no mention of which train was to take the siding.

The second order superseded the first by changing the meeting point, with the wording "instead of." Standard rules, which permit an entire order or part of an order to be superseded, also state: "When a train is directed by train order to take siding for another train, such instructions apply *only* at the point designated in that order, and do *not* apply to the superseding order unless so specified."

Consequently, the crew on No. 35 were wrong. They should have taken the siding, which would have been the normal procedure if they had received a straight meet order with No. 36 in the first place. You see, No. 36 was superior by direction and would not take the siding unless so instructed. •

OUR New York Central roster delighted Simon E. Herring, 908 Rush Ave., Bellefontaine, O., a relief

engine dispatcher on the Central (Big Four) and a *Railroad* reader since 1932.

"Your magazine is just right for me," he says, "fact articles, fiction, pictures, and departments. I buy three copies of each issue, one for myself and two for foreign correspondents."

He adds: "The Central's A2a Class Pittsburgh & Lake Erie 2-8-4's—9400-9406—are running today on the Big Four between Bellefontaine, Indianapolis, and Cincinnati. They came here from McKees Rocks, Pa., where they had been stored for years. We are now dispatching from 15 to 20 steamers a day out of Bellefontaine.

"My father was a boomer fireman, hostler, and engineer who worked on about 20 different roads. From 1912 to '17 he ran engines on the old St. Joseph Valley out of La Grange, Ind. Where can I get an authentic timetable of that old line?"

The following corrections in our New York Central steam roster (Dec. '55) are listed by Edward Scarlett, 73 Dale St., Stamford, Conn.:

Class B-10w, Nos. 6878-6797 should be 6878-6897.

Class B-104, Nos. 9141-9143: No 9140 also should be listed.

Class H-5j, Nos. 1200-1205; 1206-1213 (B&A) should be B&A 1200-1205; 1206-1211; 1213. On Jan. 1, '44, there was no 1212.

Class H-5p, No. 1369 should be H-5q.

Class H-5t, Nos. 1477-1488 should be 1477-1478.

Class J-1e, Nos. 5395-5405 should be 5395-5404. (No. 5405 is J-3a and listed as such.)

Class K-3n, Nos. 500-506 (B&A) should be B&A 500-503; 505-506. There was no 504 on that date; there were only 34 Class K-3n's: six were B&A (as above); the remainder were NYC as listed.

Class U-2f, Nos 6560-7599 should be 7560-7599.

Class U-3a, Nos. 7745-7748 were Lima, not Brooks. There were 81 U-3a's, of which: 30 were Baldwin, 34 Alco, and 17 Lima.

Class U-3b, Nos. 7989-7997 (NYC) should be 7989-7994. On that date there were no 7995, 7996, nor 7997.

Class U-3c, Nos. 7600-7603; 7605; 7607-7608; 7610; 7612; 7614. Listed as Lima; should be Alco. There were 70 U-3c's, of which 30 were Alco and 40 Lima.

"Anyone who wants information on Central's diesel classes may contact me, as I have the details," offers A. R. Shade, Jr., RFD 2, Columbia Station, O. He comments as follows on the electrics in our NYC roster:

Class P-1a (200 through 221) are now Class P-2a (223 through 243), having been rebuilt by GE for Grand Central Terminal service.

Diesels 3200 through 3203, Class DCA, 2a, and 3210-3211, Class DCB, 2a, are now numbered 3504 through 3506 and 3202-3203, having been rebuilt by EMD with 576b engines and GM equipment.

The Central has recently been pairing FM and EMD units in freight and passenger service, a practice common on many roads.

Additions to NYC diesel roster:

Class DRSP 5a numbers 5900 through 5903, lettered "CUT" and used as CUT passenger pullers. Class DFA 4b numbers 3805 through 3821, while DFB 4b numbers 3702 through 3717.

Contrary to caption on page 78 (Dec. '55), the Central has engines numbered 1000 and 1001 as well as 4200 and 4201. This road is unusual in that it numbers each unit instead of using A and B, as some roads do. A three-unit Alco road freight is numbered, for example, 1000-3300-1001.

Locos 509 and 510, now designated X509 and X510, are used at Collinwood shops and roundhouse for shopwork. ●

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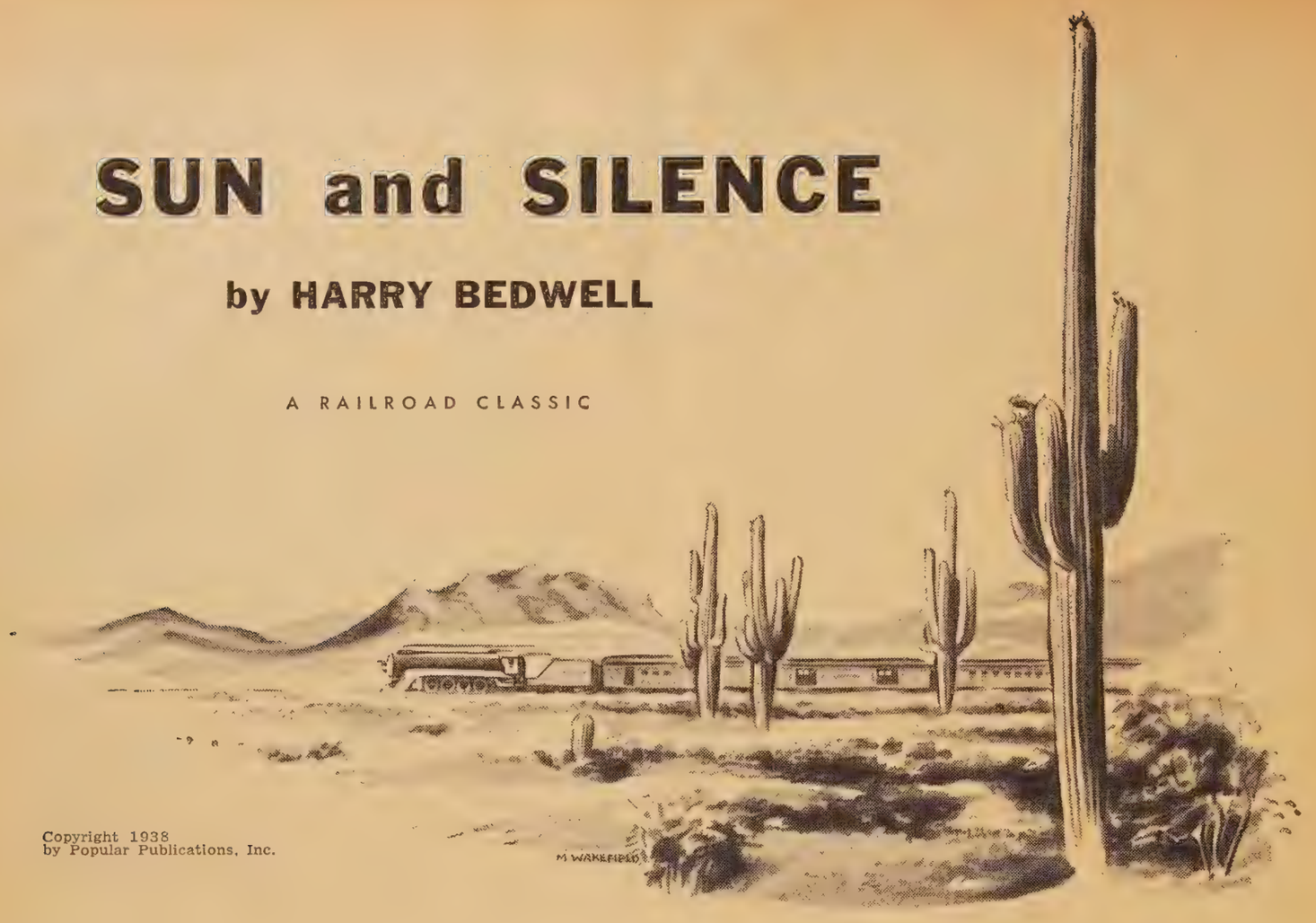

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"It Gets You," Said the Desert Brass Pounder, "the Sun Just Hanging There All Day, Glaring, and Everything So Still You Can Hear Yourself Think."

A MAN seated on a bench near the door to the Chief Dispatcher's office said, "The sun gets you." He hunched over his spread legs in such a way that his thin hands hung down between his knees. The only other person in the room was a young boomer telegrapher, Eddie Sand. Eddie turned a page of the paper-backed book he was reading and grunted, "It sure does."

Wooden awnings slanted low over the narrow windows, but the desert sun thrust a hard white light into the battered hallway. Outside, the heat danced in a thin fog-gray radiance.

The man cracked his knuckles and said again, "The sun gets you." His long hair hung like looped curtains on either side of his face. "The sun and silence," he added.

"And the heat," said Eddie. "There's plenty of that on the Southwestern Pacific. Especially now."

"Yeah, the heat," the man considered. "But that don't bother so much. It's the sun just hanging there all day, glaring; and everything so still you can hear yourself think, like little wheels clicking in your head. Except when a train is bustin' by."

He studied Eddie for a moment. Then he asked, "You going to hit the chief for a telegraph job?"

"Sure," said Eddie, who could read and converse at the same time.

"He'll send you to a station out on the desert. And after awhile the sun'll get you—the sun and silence."

"It will," Eddie agreed, "if you stay long enough."

"Well, I stuck for five years," the man offered. "They sent me to Gravel and I been there ever since. He just now called me in. I bulled a train order and he says I need a change or something. But now that I'm here I want to go back."

He stared at the floor.

"Nights are pretty good," he went on. "There's things at nights—like friendly spirits. The stars come down close and whisper. And there's no sun." The man raised his head and smiled oddly. "It's kind of companionable then."

Telegraph sounders muttered beyond the wall. A flick of desert breeze slipped into the hall. Eddie sneezed and read on placidly.

A decisive step came down the hall and around the well of the stairs. When Superintendent Barabe crossed any space it seemed like conquered territory thereafter. He swung into view and seized the door knob to the Chief Dispatcher's office.

The man by the door stood up. Eddie didn't raise his glance from the

printed page. Buck Barabe paused. He had caught sight of the boomer's head studiously inclined over the book, the glint of orange in his hair, and the sharp-edge profile.

"Eddie Sand!" he greeted.

Eddie closed his book carefully on a marker and stood up. "How are you, Mr. Barabe?"

The Superintendent put forth a big hand. "Three years and a little over," he reckoned. "I was wondering just the other day."

"I got a cold in my head working on the Great Northern," said Eddie, "and it wouldn't go away. So I returned here to see what the sun would do for me."

"Come into my office," said Barabe. "We have plenty of sun there," he added with a wry grimace.

But Eddie held back. "No, sir! Any time I go into your office I come out with a load of trouble. I aim to reach a very old age, but I'd never make it if I do what you say. All I want is a nice, quiet, telegraph job out where the sun shines warm—until I get this cold out of my head. Then I'll be moving along again."

The Super chuckled. "All I want is to hear some tall talk of what you've been doing since you left us."

"You haven't got some tough job, have you?" the operator asked suspiciously.

"Not this time," said Barabe. "Come along," he insisted, and they went down the hall.

"Watch out the sun don't get you," the man called after them.

In the big office where shutters held back the lashing sun the brass collar and the young boomer recalled past times when death and disaster moved boldly about the Desert Division. Then Barabe got a brief picture of Eddie's jaunty wanderings. Night operator on the D&RG in the high Rockies, third-trick dispatcher on a little Iowa line, a day job in a Canadian Pacific yard office at Winnipeg, and the inevitable drift to the Southwest again.

Barabe studied the rover. Once he had given Eddie a watch engraved with the SWP's appreciation of his courage and cunning.

"All very interesting," he agreed, "but a waste of time. And where does it get you? Why don't you stick with us and land some place? You've got the sense."

BARABE knew Eddie's capacity well. On the job the young fellow did his work with cool and watchful precision. But behind the direct gray eyes was a restless spirit that would never let Eddie Sand abide for long in one place.

The operator shook his head.

"I thought once before," Barabe took up his designs craftily, "that you might settle down. We don't grow younger, and one day you'll find yourself stuck in some hole doing a dime's worth of telegraphing because you can't get anything else. Or maybe out altogether on your ear."

"That man waiting to see the Chief Dispatcher," Eddie said softly. "He seemed like he'd lost his marbles."

Barabe frowned. "Griggs. He stuck too long in a desert station and now he's a little balmy. I don't know that we can use him any more."

Eddie's lips tightened. "How long have you been on this job, Mr. Barabe?"

"Twelve years," Barabe answered with a strong man's pride in the work he has done, "and they've been mostly fighting years."

"Had a lot of fun?"

The official sighed. "Sometimes it's been a heavy responsibility."

"For twelve years you've sat here," Eddie mused. "You never see much beyond this white oak desk. Everything comes and goes across it. You never watch the Feather River go raving mad down there a thousand feet below the line. You never hear the big hogs snarl at Soldier Summit, nor smell magnolias on a wet spring night, nor the north woods when they drip fog."

Eddie smiled and tapped the desk.

"You'll die here some day, mister," he assured the Superintendent mildly. "You'll crumple up on this desk. Or they'll retire you, and you'll die in bed soon thereafter."

Men, in or out of service, didn't talk that way to Buck Barabe. The Super thrust out his chin. But the short retort didn't get beyond his clipped mustache. The bright gray eyes met his firmly, with careless gravity, so

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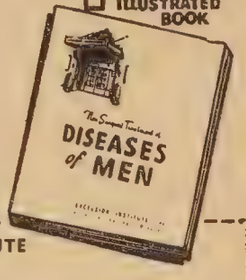

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that Mr. Barabe realized again that this person had no fear of him. He relaxed and leaned back in his chair.

"Go on," he growled. "Let's have some more of your bright chatter."

"That man Griggs waiting outside," Eddie nodded. "He got so that he was talking with things he couldn't see. His thoughts ticked in his head and the stars came down and whispered. Now that he's away, he wants to go back, and you won't let him."

"Well, what's your answer?"

"You both stay too long in one place. It gets you. Whether it's the sun and silence or the endless grief shoved across your desk. Both of you should circulate more."

"Some day," Barabe declared, "somebody will break your damn neck for being so smart."

"It's been tried."

Eddie smiled tranquilly. He sneezed and blew his nose, while Barabe's shrewd eyes became predatory.

"All right!" the official said. "Go on down the boomer trail and see where you come out. Meanwhile, we've got a job for you, I'm sure. Let's see."

He pushed a button and told the flaxen-haired kid, who slipped in, to ask the chief to step over. A few seconds later Chief Dispatcher McKeon came in. McKeon was bald and turbulent and somewhat abrupt.

"Mac," said Barabe, "Eddie Sand here has a bad cold and wants a job where there's sun. You need a man at Cinder Patch. That'd be a good place for him to dry out."

"Yeah, but I could use him—"

Something stopped McKeon—something plucked from the air, or a sign from his boss.

"Yeah," Mac agreed. "I guess that would be the best place."

Eddie studied them sharply. "Cinder Patch hasn't some special kind of trouble, like at Pigeon Pass when the lightning slinger kicked me in the stomach?" he inquired.

Mr. Barabe scoffed. "All you'll have to do at the Patch is telegraphing."

But Eddie wasn't deceived. Instinct hinted of something else at Cinder Patch, something latent they wanted to make sure about. Barabe was wily. Almost Eddie spoke and said he wouldn't go. A lurking stubbornness checked that and bade him look behind the furtive signs and signals that passed between these two crafty officials.

"You'll work the day trick," said Barabe. "The other operator is an old head, but he prefers night duty."

It must be that Barabe was sending him to Cinder Patch for some purpose other than to work a daily trick. Eddie gave a bright hard grin.

THE SUN was making its final effort for that day to carbonize the world as Eddie Sand stepped out on the platform. The Southwestern Pacific yard grumbled and chuffed with switching. The smell of exhausts was pungent in the thin air.

A switch engine hurtled past, and a switchman greeted him from the footboard. "Hey, Eddie! When did you git back?"

Hi Wheeler, a lanky brakeman wearing a thousand-miler shirt, ambled up from the sidings. He sighted the op and yelled, "Eddie!"

In his exuberance Hi forgot that the boomer had once trained with professional wrestlers. It was difficult to fathom the quick hitches he could paralyze you with. The brakeman slapped Eddie's back with the force of a mule's kick. He roughed the boomer playfully.

Eddie let his book slip from the clamp of his elbows. A half-Nelson is not easy to get on a man as tall as Hi and it doesn't punish enough, anyhow. In a quick reach he caught Hi's wrist, twisted it into a hammer-lock, and tightened it.

He then bore down sharply with his knees on the back of Hi's legs until the brakeman knelt helpless on the platform. Eddie kicked him benevolently in the pants and let him go.

"Seems like yesterday," he remarked, picking up his book.

"Imagine it!" said Hi, cautiously straightening the kinks Eddie had put into his long wheel-base. "You ain't changed a bit. Goin' back to work for the SWP?"

"Yeah, at Cinder Patch, beginning the day after tomorrow."

"Haw!" Hi scoffed. "You don't *work* at the Patch. You just try to live. How about roomin' with me tonight and riding out on Eighty in the morning."

"Thanks," said Eddie, "I will."

The glare of the low sun was thrust under the wooden awnings along the stark street. People drifted in the garish light like fish in a glass tank. Hi turned in at Mark's bar. Later, they moved away in search of thick steaks.

"Eddie," said Hi, "where've you been?"

"Here and there. And don't you get boomer notions. A blonde is going to hang wedding bells on you some day, and the upkeep of blondes is fierce."

"Don't I know it! But I'm about

Rynerson—H. L. Kelso

HARRY BEDWELL

Born in Iowa, he became a boomer brass pounder and a great writer. In some respects he was like his fiction character *Eddie Sand*.

Harry died recently. His close friend and literary executor, Bill Knapke, found in his desk an unpublished manuscript, "The Sound of an Avalanche," and sold it to *The Saturday Evening Post* for a price that ran well into four figures. We don't know when *The Post* will publish it.

Meanwhile, we are reprinting "Sun and Silence," one of the 32 Bedwell stories that appeared originally in *Railroad Magazine*.

Our next issue will carry another famous Bedwell yarn from long ago, "On the Night Wire." And after that—readers' comments will shape our future policy on fiction reprints.

100 YEARS OF CIRCUS TRAINS

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through with Barabe. He rawhides you now."

Eddie's eyes narrowed thoughtfully.

EIGHTY was a mixed freight, thirty-seven cars. She puffed out of the yard and took to the flaming desert. Conductor Doran got himself and his orders and his waybills assembled at his letdown desk. Eddie climbed to the cupola, where Hi Wheeler had folded himself moodily into a swinging chair.

He opened his book and read placidly. The desert ambled by, torrid and savage. Waldo and Morena, lone stations like sentry boxes set on the grim landscape, tipped their semaphore arms politely in turn and let them pass. Half-naked operators signaled ribald insults.

Eighty paused to set out a load at Keen and pick up two empties. Hi grumbled at being disturbed. At Salon, another daub on the desert, they were given the board, but a scarecrow of a man stood before the station and waved them down with a suitcase.

"What the hell!" said Hi as he slid to the floor.

Eighty slowed and snailed. The scarecrow swung aboard the caboose. He batted his valise against the railing and his straw hat fell off. Hi speared the hat out of the air and signaled the head end a highball.

"Where you goin', Macgonegal?"

"To Los Angeles," the man shouted, his voice out of control.

"Meet Eddie Sand," Hi introduced. "He's another no-good brass pounder like you."

Eddie peered down and said hello.

"I've heard of you," Macgonegal piped. "I've been operator at Salon five years and this is my first leave. And am I gonna take old L.A. apart!"

"Must all operators stay out here five years before they get time out?" Eddie asked politely.

The man deposited his hat and suitcase and began to explain. Eddie resumed his reading. Macgonegal's high-pitched conversation flowed on. Hi made rotary motions with his forefinger around his ear and winked a bloodshot eye at Eddie.

Eighty checked and stopped at Marco, the engine at the water tank near the station. This left most of the train well out of town. Marco was an irrigated settlement. Macgonegal was to transfer there to Twenty-nine, a westbound passenger that wouldn't pick him up at Salon. He gathered up his possessions.

"You'd better stay aboard and ride up to the station," Conductor Doran told him. "We take the hole here for Twenty-nine."

The conductor went out and forward. Hi glanced back at the rails distorted in a distant mirage and followed him toward the depot. Macgonegal talked on.

The rumble of drawbars started at the head end and moved quickly down the train. Eighty began to roll, then picked up speed rapidly. Hi came trotting back across the top in the blazing sunlight. The speed increased. Hi slid down the ladder at the front end of the caboose and stamped inside.

"We've got time on Twenty-nine to reach Acid, and we're highballin' out of town. You'd better unload, feller!" he yelled at Macgonegal.

The man stopped talking and took up his things. Eddie descended from the cupola and followed the two onto the rear platform. The engineer was rolling them now. The cinder path flowed by like a dark stream. Eddie wondered. Macgonegal, undisturbed, glanced about from the bottom step.

"You're past the station," Hi shouted at him. "Unload!"

Macgonegal tucked his valise under one arm. He set his hat on firmly. Then he stepped off the bottom step. Startled, Eddie and Hi watched a phenomenon of momentum.

The man's feet spurned the cinders at first touch. He floated. Then he turned over in a quick flip and fell down hard. There was a split-second pause and he flipped again. Cinders spurted.

He paused longer before he made the next turn. This continued for a car-length. Then he took a long slide like a frantic runner heading into third

base. His suitcase banged on the platform and broke open. Stray garments raced vainly after the caboose as it drew away.

THE WHINE and rumble of the rambling Eighty and blanket-like heat grew in a terrible monotony of sound and torture. Hi opened a cupola window to the blast, but closed it at once.

"That air feels like emery paper," he judged. Then later: "We're comin' to the Patch."

Eddie closed his book.

"If," he threatened, "you arranged with the eagle-eye not to slow down too much to let me off, I'll pull the air on him and twist your neck."

The dun-colored station with the pencil-like semaphore rose out of the shimmer. The train checked speed and the caboose crawled by. Eddie stepped off and received his suitcase, his trunk, and a bundle of new bedding.

"I hope a sidewinder bites you in the ear," Hi wished cheerfully.

A long ridge sloped down from the back of the station, circled westward, and climbed into smoky mountains. Nothing moved under the brass arch of sky except a flickering mirage.

Then the semaphore squawled as the arm was thrown out above him. Russ Kruger, the other operator, came to the station door. He was a big man with sleepy, bewildered eyes and he wore ancient khaki trousers and the remnants of a shirt. Nothing else.

Eddie Sand moved in.

Time here lost its meaning. It stood still and listless in a hot vacuum. Heat danced all day like pain-racked spirits. The level sun thrust a concrete column of light through the west end of the bow window. It reached halfway across the length of the narrow telegraph table. Eddie lounged there, waiting for Seventy-nine to pass.

Russ Kruger tinkered with his invention, a two-knob telegraph key. He breathed moistly and talked.

"You see how it'll eliminate the wrist movement," he rambled. "Operator with a broken-down wrist, it'll make him as good as any."

Russ expected no reply. These men who stayed too long on the desert, Eddie reflected, talked incessantly when they had anyone to converse with—and likely, too, when they hadn't.

Smoke boiled suddenly from the skyline to the east as Seventy-nine topped the hill.

"He will be throwing off that beefsteak we asked him to get for us," Eddie reminded Russ. "You watch when he tosses it off so it don't get lost in the brush. I'm hungry."

Seventy-nine called for the board. Eddie pulled the left lever and the westbound board bowed from its high pole.

"Thanks," the freight train blasted.

Its passing shook the little station into terrified quaking. The windows chattered. Eddie leaned on the table and watched the bucking cars pass.

A figure, blurred in the dust, stood on the lower rear step of the caboose. It crouched suddenly as it neared the station, then straightened. A brown paper package shot out of the blur. Russ, standing beside the door, ducked it gravely.

Eddie stepped back as the missile flew in at the open east window. It swept across the long telegraph table. It uprooted a chattering relay, threw pens and pencils about the office, plunged through the west window, and bounded over the platform. Eddie followed its flight incredulously.

"Anyhow, it missed me," he grinned. He glanced at the rear of the fading freight. "That would be Hi Wheeler." It was a good guess.

Russ came in to examine the mass that, but a moment before, had been a nice steak.

"Look, Russ," the boomer urged, "you are the inventor of this outfit. First thing, see if you can tinker these busted telegraph instruments, while I clean up."

Russ Kruger glanced at the table. His face darkened sullenly.

"Hi Wheeler did that! Some time I'll fix him." The eyes were yellow as they stared at the smudge far down the grade. "He's jealous because I can invent things. Always belittling me. Always playing tricks."

THERE WAS a bench under the lean-to shed on the west side of the station where the operators filled and cleaned the kerosene lights. Of afternoons a warm breeze came in from the Gulf of California. Russ connived here at his eternal inventions.

A passenger train stormed by, and presently Eddie came into the shade with two train-order hoops in his hand. They had been tossed back to him by the crew of the passenger train after he had delivered a "19" order on the fly. He watched Russ tinkering. Then he wandered about the station, gathering scraps of material. He soon returned and began to rebuild one of the train-order hoops.

He lapped a good foot of old air-hose thrice about the top of the hoop and bound it. After that he sawed two six-inch lengths from a redwood scantling and sandpapered off all sharp corners and rough surfaces. He notched them in the middle and tied each to the loop at the end of two feet of cord. He made a careful job of it.

"Speaking of inventions," he murmured. Then he shook his head. "I've begun talking to myself," he mused. "That's bad."

He sniffed and blew his nose. His cold was all gone now, he decided. He'd best be on the move. Get where there were people. New Orleans first, to see if the Louisville & Nashville didn't need another good brass pounder. He whistled softly.

Of course, he wasn't leaving at once. He glanced at Russ Kruger and his lips lost their pucker. He wasn't sure, but it seemed that something should be done about Russ. He couldn't quite make up his mind, and he'd have to stick around till he did.

Eddie inspected his contrivance and took it into the office. There he wrote a message and attached it to the clip of the train-order hoop.

The sun was burning itself out on the ridges as Seventy-nine rambled over the hill and blasted for the board. Eddie gave it to him. When the engine had rocked past he stepped out in front of the depot and signaled the rear end by waving the hoop in indicate that it was for him—a message or some mail.

He knew it was Hi's day on this run. So he stood back a little from the rolling cars till he made sure it was

the gaunt clown of a brakeman who stood on the bottom caboose step.

Eddie moved in close then and extended the hoop. He let it go as Hi thrust hand and arm through the loop and swooped away with it. Then the boomer watched closely the resulting action.

The air-hose had added enough weight so that the hoop shot up Hi's arm, not stopping at the crook of his elbow as usual. It hit him sharply under the chin. The two pieces of redwood swung wide at the end of their lengths of string and snapped over fast. One reached across the top of Hi's hat and rapped him between the eyes. The other came around from the left, wound the cord once around his neck, and slapped him on the jaw.

Hi bounded up the steps to the platform and tore the thing from him. He studied it warily, prepared to duck any further attacks. Then he detached the whimsical note from the clip and read it:

Dear Mr. Wheeler: Hereafter, when you unload a cow at this station, please set her out on the siding and not in the office. Animals are not permitted in the depot unless they are in the train service. Eddie Sand.

As Eddie returned to the station he realized suddenly that Russ had watched the incident from the doorway.

"You didn't do that right, Eddie," the older man complained. "I'll build one that will make Hi Wheeler look small. I'll tie spikes to it."

"Look, Russ," the boomer pleaded, "that brakeman is just acting the damn fool for fun. Don't pay him any attention. Better work on that key of yours. You've got something there."

But Eddie was uneasy, which he seldom allowed himself to be. A haze-like thin smoke crept into the harsh air. The silence deepened. Russ muttered and moped despondently.

THE TENSE feeling tightened as that day began. Then at noontime black clouds rolled up from the south and abruptly shut out the sun. Lightning cut through the rolling mass and a rending thunderclap shook the inert earth. The tension snapped with that crashing sound.

Russ Kruger asleep in the back room, awoke bellowing like a hurt animal. He charged through the station, his bare feet slapping the floor and his old nightshirt tugging at his knees. He breathed like a saturated sponge.

Half-gallon drops of rain drummed on the roof while a spike of lightning stabbed the earth. A ribbon of fire flicked down the telegraph wire and unrolled a ball of flame on the office floor. Fuses went out in tight puffs of smoke.

Russ leaped, screamed, and bolted out of doors. The clouds boiled over all the sky, and now the rain came in driving sheets. They crumpled in gleaming cascades on the hillside. The storm seemed trying to pay quickly for its long absence.

Russ stopped by the semaphore and stood with his fat sullen face lifted and let the driven rain flow over him. In his nightshirt he looked like a heathen priest making incantations.

Water collected in pools. Eddie replaced the burnt fuses, and Russ came back and stood in the doorway, dripping and muttering. Lightning struck and thunder blasted. The sound of water deepened to a roar. The telegraph instruments awoke to recount devastation.

Gullies that had felt little water for years brimmed and gouged out new channels. Sections of main line began to weaken, to wash out. Slow orders were given to all trains.

A freight train crawled by at twelve miles an hour. A passenger train, three hours late, followed. Darkness fell early, and the lightning retired to the horizon where it winked and flared.

There was a bad break in a low pass near Sunbridge, a blind siding west of Cinder Patch. The water had dug a channel along the ties and undermined the track. A work train pushed doggedly to it and threw out a temporary track known as a "shoo-fly," then another. The telegraph operator, sent out with the train, cut in his portable set and kept the harassed dispatcher informed of conditions there.

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A strange man in Los Angeles, known as "The Voice of Two Worlds," is offering, free of charge to the public, an astounding 64-page booklet analyzing famous world prophecies covering these times. It shows that four of the greatest prophecies could not come true until the present time. But now they can, and the years that change the world are at hand. Great dangers but still greater opportunities, confront forward looking people in 1956

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Russ took over as dark came. Eddie cooked supper on the old wood range in the kitchen. He made a two-gallon kettle of coffee and kept it hot on the back of the stove. The rain thinned and whispered.

At seven o'clock that night, a section gang pumped wearily in from the east and stopped and tramped into the office. The Mexican crew warmed themselves at the stove while the foreman hung over Russ at the telegraph table, dictating a report to his roadmaster. Eddie served hot Java in tin cups.

The roadmaster ordered them to continue west to Sunbridge, observing the condition of the track and, if possible, making repairs where needed. Each of the gandy dancers drank a second cup of coffee and they all went back into the rain. The hand-car with two dim lanterns, tiny specks in the vast dark, moved slowly westward. Then the rails were silent again.

SEVENTY-NINE came snailing in an hour later and grunted to a stop. Hi Wheeler stormed into the station gasping profanity, with water trickling from his slicker. He blew a stream from the end of his nose. Then he took off his rubber hat and flipped it so that water sprayed over Russ Kruger and the train orders on the telegraph table.

That was Hi Wheeler all over, a big gawking clown with a hill-billy's crude sense of humor.

Like other telegraph operators, Russ would have preferred you to assault his person rather than disturb his train orders. He was entrusted with their proper delivery and that involved the safety of lives and equipment.

Russ stood up, muttering. He took a step toward Hi, who yelled and fell into grotesque fighting postures.

Eddie stepped between. He helped Hi out of his slicker, then threw it deftly over his head, and held him struggling and smothering in its folds.

The brakeman twisted himself free but prudently refused to attack in return. He was even more rowdy than usual. He had been bumped off the rear end of the train by an older man and had, in turn, bumped the head brakeman. So he was riding the engine cab that wild night, which annoyed him, and the storm added further irritation.

Russ sat down, scowling and muttering. Conductor Doran splashed in and talked through him with the dispatcher, who ordered Seventy-nine to wait at Cinder Patch until the section gang that was ahead of him reported from Sunbridge.

The engine crew ducked into the office to get the news. These men relaxed from the strain of the run through the storm. They blundered and scuffled about the little office, cheerfully libeling one another and the two operators with broad insults. This angered Russ, who was copying a "hold" order. He opened the key and bellowed at them savagely.

Eddie brought Java and listened politely to the commotion. Russ repeated the order. He glowered and squirmed as he fingered the key.

It was past eleven o'clock and Eddie headed for bed. He said that if anyone interrupted his sleep he'd break the guy in two. Slamming the door, he took a lamp from the kitchen. His bedroom was next. He undressed and was about to blow out the light, but on a hunch he turned it low.

That wary sense of his had been stirring during the evening, and now in the quiet of his room it began to move more explicitly. He listened to the voices, the shuffle of feet, and the sounder's faint rattle. They seemed normal. He got into bed. The rain hissed at the windows. Then all sounds drifted into the far distance and died.

After the first dive into heavy sleep had relaxed him, the vigilant sense began to stir again. A train was moving in the storm that should have been held some place. Then it was gone from hearing. The warning sense made him restless.

Eddie turned over, opened his eyes, and reached for his watch. It was 1:35. He tucked his arm under the cover again. Rain and wind scratched at the windows. There were no voices in the office now, no noise of moving feet. The sounder was quiet.

But a peculiar note flowed through the tempest. He listened. It sounded like a series of low, crafty chuckles.

EDDIE slipped quietly from bed. That laugh was not normal. He knew now, as he put his feet into cold slippers, that he'd been waiting here at Cinder Patch for this to happen.

Turning up the light, he went through the dark kitchen and opened the office door. Russ sat at the telegraph table. His big mouth was twisted in a grin and his eyes glittered insanely. He caught sight of Eddie and the chuckles turned into a roar.

"Ho, ho, ho! They won't belittle me again. They won't play any more tricks on Old Russ. Ho, ho, ho!"

Eddie felt a sudden chill.

"What did you do to them, Russ?" He forced a grin. "I'll bet it's good."

The night operator's eyes danced like fanned yellow coals. He was eager to explain.

"You know just beyond Red Dome." He snatched a pencil and diagrammed. "The track goes around the bluff in a short curve, sharp like this,

---

NIGHT TRAIN

THERE'S a certain something about a train
That does things to me I can't explain.
A whistle, a roar—and a streak of light
Goes plunging headlong into the night,
Hurling itself over gleaming trails
Marked out by the headlight upon the rails.
Just a *whish* and it's passed me, front to rear,
And I'm watching the markers disappear.

There's an aching something, away inside,
That's longing to ride, and ride, and ride—
With the rattle of gravel against a tie
And a *clickety-clack* as the poles whiz by;
And the musical toll of a crossing-bell
Flung back on the wind, as we race pell-mell
Toward some vague, far place in the inky black.
Ah, it's lonely here by the railroad track!

—Willis Cairnes

---

and then follows along right under the mountain. There's a deep gully here, you remember, with a short trestle across it. See? You come onto it suddenly around a shoulder on a curve."

Eddie nodded as the other man's pencil scratched and darted.

"The section gang that went west," Russ continued, "reported at Sunbridge that they'd just got across that little trestle when a cloudburst took it out. The foreman said they heard it coming and had to pump like hell to reach the other side. I bet that gang was scared."

"So what did you do, Russ?"

"I heard Sunbridge report that bit of news, and then the dispatcher told me to tell Seventy-nine that he'd be tied up here till morning anyway."

Rumbling laughter swelled from Russ's huge body and filled the quiet room.

"You see what I did, Eddie? Those crews scuffling about my office and making jokes on me till I can't hear the dispatcher. All so smart with a sly finger pointing. *I didn't tell them what the section foreman reported!*"

The night op winked at Eddie.

"I just made up an order myself and gave it to them," he said. "It annulled the hold order and let them go to Sunbridge. I told them that the foreman had said the track was in fine shape. So I got rid of them and played my little joke, too. I bet the water is twenty feet deep in that gully, and they won't know till they are in it. Ho, ho, ho!"

The picture was clear now. Eddie tried to make his tone casual.

"That's a good one, Russ."

He didn't know how long Seventy-nine had been gone, whether there were seconds or minutes yet to spare, or if it was past doing anything about. But on such occasions you do all you can in split seconds, and hope for results.

"That's a good one," he repeated. "But the Southwestern Pacific is short of motive power. That ten-wheeler on Seventy-nine could never be fixed up after she dived into the gully with a bunch of cars. You'd better let me tell Sunbridge to send out and stop them before they get into the washout."

Russ smirked. "Not on your life, Eddie. This is my little trick. I worked it all out. They joked me and made light of my inventions and it's my turn now."

He stood up beside the table.

"Maybe Hi Wheeler is a friend of yours," he said suspiciously. "Maybe you like him better than me. But Hi Wheeler played tricks and he pointed his finger like this. You stay away from the key, Eddie! I am in charge now and you can't touch that key." Russ made a menacing gesture.

The boomer couldn't wait any longer. He moved in with the dexterity of a skilled wrestler. But cunning flashed in Russ's brain. He gaged Eddie's intent and snatched the lighted lantern from the floor with a vengeance.

"You keep away, Eddie!"

His big arm swung the lantern back. At that the younger man locked a grip on the threatening arm, twisted it over his shoulder, and heaved.

GIVEN an opponent near his own weight, this would have thrown the night operator over his back. But Russ was fifty pounds the heavier—an inert mass with no spring or give. Eddie's feet slid half out of his slippers with that first thrust. The big man slid over his shoulder and dropped to the floor like a bag of grain. The lantern was tossed clear, crashing under the table.

Eddie held desperately to his grip. He kicked off his slippers and added a murderous crotch hold. But that big man was apparently insensible to the hurt of grip and wrench. Eddie could only roll that dead weight against the wall and hold it there.

Then, with no warning, Russ aroused from his dazed inertia. Dou-

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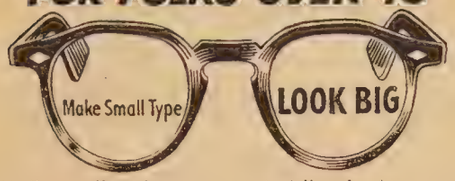

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bling his knees, he kicked out with both huge feet. Eddie slithered across the floor and slammed against the opposite side. Red dots sprayed him.

But he got his breath back in aching shudders as the drilled instinct of the ring lifted him to his feet in a rebound from the wall.

Russ came lumbering with outstretched arms, like a sly bear. Eddie avoided him till his breath stopped hurting. Then he tried to get behind the older man for a hold, but the room was too small to maneuver in. He had to grip and twist one of those arms into a hammerlock. He edged in close with his head against Russ and put his strength and craft into the effort.

The demented brain seemed to register no pain as they struggled and stumbled awkwardly about the room. Russ trampled on Eddie's bare toes. A chair crashed under them. They knocked over the stove and it broke, spraying live coals over the floor. Eddie trod on them with naked feet. Pain blurred his eyes and relaxed his hold.

Gas and smoke began to choke the room. Russ wrenched free; his two great hands came together about Eddie's neck, and clamped.

The boomer hadn't wished to hurt this man gone mad, and that fact hampered him in the struggle. But with the grip tightening on his throat, Eddie lost that clemency.

He thrust his hands upward through the big arms and broke the strangle hold with the wedge of his own forearms. Then he locked his fingers on the back of Russ' neck, jerked the head downward quickly, and brought his knee up to meet the descending chin.

There was a sharp crack at the contact. Russ sagged then. His knees buckled, he drooped and came down to the floor and flattened out.

Eddie dragged him clear of the smoking coals and stepped over him to the telegraph table. His hand slipped to the key and, unsteadily at first, he called Sunbridge.

"SB, SB, SB," the sounder snapped.

Red Dome was much closer to Sunbridge, and if Seventy-nine wasn't making too much time in the storm they might get a locomotive to the break before the freight reached it.

If they did, they could set off fusees and maybe light fires and show the engine headlight as close on the other side of the flooded gulch as they could get. If they made enough light, it should stop the freight before she got into the cloudburst.

"SB, SB, SB, DA," he tapped.

He watched the coals on the floor grow brighter. Tiny flames sprang up and danced. Rain drummed at the windows like the steady throb of an engine's exhaust—like the sound of Seventy-nine rounding the short curve and heading into the boiling arroyo.

The flames multiplied about the baseboard and the smoke billowed. Had that damn operator gone to sleep? Eddie flung the imperative call across the stormy desert:

"SB, SB, SB."

"SB, SB—" The circuit broke; the key was dead under his fingers.

"I, I, SB," the sounder said stolidly.

"Get this quick!"

He had composed the message in his mind, clear and terse, and he sent it swiftly in racing Morse. The operator at Sunbridge paused with open key when he had finished. Then he flashed back a quick, "OK!"

Singing flames reached for the ceiling. Russ rolled on the floor and choked. Eddie pattered into the kitchen, snatched the bucket of drinking water, and flung it in a sweep. As the fire hissed at the drench, he sprinted out in the rain to the water barrels beside the track.

Half-naked, drenched and battered and scorched, he fought the hungry red demon till it smoldered and died.

THE SUN was sparkling cheerfully on the ravaged desert when a freight train finally pushed up from the west and pulled into Cinder Patch. It was Eighty of the day before, carrying white flags now, and the crews of Seventy-nine and Eighty had turned around at Sunbridge.

Hi Wheeler swung down from the locomotive. Eddie eyed him suspiciously from the doorway. The brakeman nodded backward to indicate Mr. Barabe, who had followed him from the engine to the ground.

Hi came close. "The Old Man's spitting spikes. Anything you want me to say, I'll say it."

"After I've said my piece," Eddie replied grimly, "there won't be much to add."

"We didn't miss getting into that cloudburst too far," Hi breathed. "Thanks for saving my neck."

Russ Kruger lifted a weak and frightened voice from his bed in the back room. "You ain't gonna let them hurt me, are you, Eddie?"

"They don't come that size when I'm around, Russ," Eddie answered. "You just take it easy."

Buck Barabe's dark eyes were fringed with wrinkles.

"If I have the straight of what happened here last night," he said, "we'll have to put Kruger in jail."

"For what?" Eddie asked with cold venom. "Because you kept him on the desert to deteriorate and go insane? You must have known a year ago that you should transfer him out of here. But it's hard to get men to take these jobs, and so you let it ride. You sent me here figuring that if anything went wrong I'd take care of it. That was shifting your responsibility."

The brass collar glared his resentment but did not interrupt.

"Your job is to take care of your men as well as discipline them," Eddie flung at the Superintendent. "Whatever happened here last night is your fault, mister."

The Super took two steps.

The boomer shrugged and spoke with icy clearness: "If you don't send Russ to the hospital and keep him there till his mind clears up, I will."

He stared belligerently at the official, but Mr. Barabe gave no sign.

"I'll now point out four examples of what it is to keep on working for the Southwestern Pacific Railway, as you asked me to do," Eddie went on. "There are Griggs, Macgonegal, and Kruger. And there is you. You've all stayed in one place doing the same things too long. You've all lost too many marbles."

The boomer limped through the doorway. "You'll have to send two operators to Cinder Patch pretty damn quick if you want to keep the station open."

Mr. Barabe strode to the door and peered in. He studied the wrecked office. After a time his wrinkles relaxed in a wan smile.

"I guess you're right, Eddie Sand," he said. "It does get you, the sun and silence." ●

RAILBOOKS

FROM HORSE TRAILS TO STEEL RAILS, by W. E. Wardwell, 96 pages, Falmouth Publishing House, Rockport, Me., illustrated with photos and line cuts, $4.

Published under auspices of the Worcester (Mass.) Historical Society, this book deals largely with the spiderweb of tracks that covered New England during her industrial boom. It gives much space to the romantic aspects of travel when décor ran to red plush, a snow-white train, a scenic route skirting Long Island Sound, and the fabulous Fall River Line boats. All of which would have made exciting reading if the author's approach were lively. Unfortunately, it isn't.

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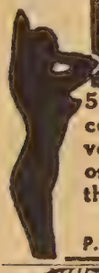

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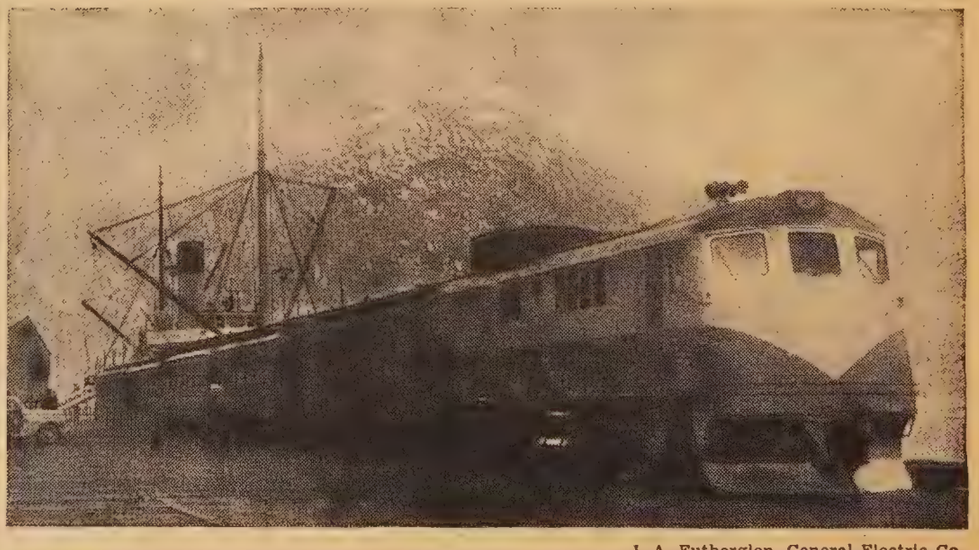
White Pass & Yukon No. 1, renumbered 51, the first locomotive to enter Skagway, Alaska. A rare photo, taken July 20, 1898. Old girl now on display at White Horse.

WP&Y steam-powered train on Broadway, Skagway's main street, about 15 or more years ago. Maybe some reader can tell us the number of this engine.



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Diesel No. 90, on the "Gold Rush Route," waits at Skagway wharf while passengers disembark from the Canadian Pacific liner *Louise*, some to board train.

WHITE PASS & YUKON ROUTE

STEAM

Number	Builder	Date	Type	Cylinders	Drivers	Engine Weight	Tractive Effort	Boiler Pressure
4	BLW	1912	2-6-2	15x20	37	120,000	15,000	160
Duchess	BLW	1878	0-6-0	10x12	30	22,470		150
8	Climax	1894		13x14	30			160
10	BLW	1916	4-6-0	16x22	45	165,000	19,100	180
14	BLW	1919	4-6-0	16x22	45	165,000	19,100	180
20	BLW	1890	2-8-0	16x21	37	114,000	18,800	150
21	BLW	1890	2-8-0	16x21	37	114,000	18,800	150
22	BLW	1904	2-8-0	16x20	37	132,000		160
23	BLW	1906	2-8-0	16x20	37	132,000		160
24	BLW	1904	2-8-0	16x20	37	132,000		160
51	Brooks	1881	2-6-0	14½x18	42	95,900	12,975	160
52	Brooks	1881	2-6-0	14½x18	42	95,900	12,975	160
53	Grant	1879	2-8-0	15½x20	36	98,600	16,000	140
54	BLW	1878	4-4-0	12x16	42	73,000	6,800	140
55	BLW	1885	2-8-0	15x18	36	100,000	15,100	150
56	BLW	1899	2-8-0	17x20	38	159,000	21,000	180
57	BLW	1899	2-8-0	19x20	38	159,000	21,000	180
59	BLW	1900	4-6-0	17x20	42	161,000	18,900	180
60	BLW	1900	4-6-0	17x20	42	161,000	18,900	180
61	BLW	1900	2-8-0	17x20	38	167,000	22,100	180
62	BLW	1900	4-6-0	17x22	44	160,000	18,500	180
63	Brooks	1881	2-6-0	14x18	42	73,350	10,600	135
64	Brooks	1878	2-6-0	12x18	33	72,000	9,750	135
65	Brooks	1881	2-6-0	14x18	42	73,350	10,600	135
66	BLW	1901	4-6-0	17x20	42	161,000	18,900	180
67	BLW	1901	4-6-0	17x20	42	161,000	18,900	180
68	BLW	1907	2-8-0	19x22	40	213,000	29,000	180
69	BLW	1908	2-8-0	21x22	42	213,000	28,260	160
70	BLW	1938	2-8-2	17x22	44	230,500	25,200	215
71	BLW	1939	2-8-2	17x22	44	230,500	25,200	215
72	BLW	1947	2-8-2	17x22	44	230,500	25,200	215
73	BLW	1947	2-8-2	17x22	44	230,500	25,200	215
80	Alco	1920	2-8-2	19x20	44	213,000	23,700	170
81	Alco	1920	2-8-2	19x20	44	213,000	23,700	170
190-200	BLW	1943	2-8-2	17x24	48	211,000	20,100	185
250-256	Alco	1923	2-8-2	18x22	48	254,500	27,540	200

DIESEL-ELECTRIC

Number	Builder	Date	Type	Cylinders	Drivers	Engine Weight	Tractive Effort	Horse-power
90-91	GE	1954	C-C	6-9x10½	34	162,000	24,000	800

NOTES ON DISPOSITION

4 Two WP&Y engines have borne this number. First, a Baldwin 4-4-0. The second was built new in 1912 for Klondike Mines Railroad, Dawson, Yukon Territory, shipped knocked-down to Skagway, Alaska, and assembled there in WP&Y shops, then run to White Horse, Y. T., and shipped by river barge to Dawson. After 2 years service, she was stored until bought by WP&Y in 1942, brought back to Skagway, and used as yard engine. She was recently sold to the Railroad Fan Club of Oakwood, Wis., for operation on Oak Creek Central Ry.

Duchess On permanent display at Carcross, Y. T.

8 Used in construction of WP&Y, sold to Washington Logging Co., 1903.

10, 14 Bought by U. S. Army Transportation Corps from Eastern Tennessee & Western North Carolina, 1942, rebuilt in Northern Pacific's Tacoma, Wash., shops, shipped to Skagway, destroyed by fire at White Horse, and shipped back to U. S. for scrap.

20-24 Formerly Colorado & Southern 69, 70 and Silverton, Gladstone & Northern 3, 4 and 34 respectively. Bought by USATC for use during war, shipped back to U. S. presumably for scrap.

51 On display at White Horse.

52 Stored at Taku, B. C.

53, 64 Scrapped, 1918.

54, 65 Sold to Tanana Mines Ry. in 1907 and 1906 respectively.

55, 57, 63 Sold to Klondike Mines in 1907, 1906, and 1902 respectively.

56 Scrapped, 1938

59-62, 67 Scrapped after World War II.

66 Scrapped, 1953.

68 Destroyed by rockslide, 1918.

69 Retired, 1954: has just been sold to Black Hills Central.

70-73 In main-line service.

80-81 Formerly Sumpter Valley 19-20, bought by WP&Y in 1920. still in occasional helper and work-train service.

190-200 Built for USATC in 1943 as meter gage; converted to 3-foot gage and shipped to Skagway. 190, 192 still in yard or work-train service, others scrapped or stored.

250-256 Formerly Denver & Rio Grande Western 470 class, bought by USATC for use on WP&Y during war years, shipped to U. S., presumably to be scrapped.

90-91 In main-line service.

FLASH!

As we go to press, the White Pass & Yukon Route has just sold its No. 69 to the Black Hills Central Railroad for active service in South Dakota's Black Hills, reports W. B. Heckman, BHC organizing committee, 1717 Tribune Tower, Chicago, Ill.

The BHC is a three-foot-gage passenger line at the foot of Mt. Rushmore near Rapid City, S. D., and is scheduled to begin steam operation Memorial Day.

No. 69, to be named *Klondike Casey*, will be equipped with diamond stack, box headlight, and big pilot. For stand-by purposes, the BHC has old Colorado & Southern No. 9, now named *Chief Crazy Horse*.

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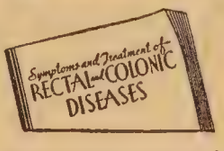

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Chicago Transit Company's new, high-speed, lightweight, MU cars reached 72 mph in less than two miles on a test run. The cars accelerated to 50 mph in 30 seconds. CTA is considering the purchase of some such equipment.

TRANSIT TOPICS

by STEVE MAGUIRE

PHILADELPHIANS are rejoicing in the new westward extension of their old Market Street subway, which comes at a time when the National City Lines, bus-minded operators of the Philadelphia Transit Co., are planning to scrap much of the city's surface rail system.

This extension had long been dreamed of. It does away with the antiquated rail bridge that crossed the Schuylkill River near the Pennsy's 30th Street station and the city's main Post Office. That bridge had been used for about half a century by east-west trolley and subway-el traffic. The change includes scrapping the el structure on Market Street east of 40th.

Since last October 31 the subway-el trains have been running beneath Market as far west as 46th, where the el takes over. And on November 7 full operation of the Woodland Avenue trolley subway line began.

Steve Maguire

ELECTRIC traction will feature a meeting March 2 at 7:15 p.m. in the Consolidated Edison Bldg., Irving Pl. and east 14th Street, New York, under auspices of the Metropolitan District, Northeastern Region, National Model Railroaders Ass'n. Free admission to all railfans and railroaders. Program includes a talk on "The Subway Is a Railroad," by a New York City subway man; a showing of slides of the New Haven Railroad's electric locomotives, past and present, and model working exhibits of overhead catenary systems and electric third-rail lines. Hosts of the meeting will be Con Edison Model RR. Club.

THREE interesting juice bulletins of the National Railway Historical Society have just come out. The 46-page illustrated *Trolley Museums,* issued by the Connecticut Valley Chapter, lists all trolley museums in the U.S.A., Canada, and Great Britain. It gives details of all such equipment preserved by fans, beginning with Biddeford & Saco car 31, acquired in 1939, which started the Seashore Electric Ry., earliest trolley museum. Roger Borrup, Warehouse Point, Conn., sells the brochure at $1.10.

Lehigh Valley Chapter issued *The Liberty Bell Route's 700 Series Interurbans: History and Roster,* 16 pages, plenty of photos, covering 12 cars that served the line from 1916 until abandonment. Copies 50c each (no stamps, please!) from Randolph L. Kulp, 602 St. John Street, Allentown, Pa.

Rail Transit in Philadelphia, issued by the Philadelphia Chapter, tells in 32 pages the story of Philadelphia Transportation Co. from 1940 to '54, just before National City Lines took over, with photos of all types of PTC equip-

ment. John H. Francis, 301 Kingsley St., Philadelphia 26, Pa., sells this attractive booklet at $1.50.

PCC CARS of the British Columbia Electric's abandoned Vancouver lines will not be scrapped, although they lay on the market for many months without finding a purchaser. This mothball fleet of 36 cars has finally been sold to a private corporation that is expected to resell them to the Vienna, Austria, transit system, report Peter Cox of Port Arthur, Ont., and Ernie Plant of Horseshoe Bay, B.C.

This same company acquired many modern cars from New York's Third Avenue Transit about five years ago, only to find to its dismay that the cars' width restricted them to a few lines.

"NO SANE PERSON objects to the abandonment of worn-out, bankrupt trolley lines, much as we regret it," writes Felix E. Reifschneider, Box 774, Orlando, Fla. "What makes railfans mad is the discontinuance of profitable, money-making, trolley lines.

"For example, every cent of transit profit made in Detroit since World War II came from trolleys and trackless trolleys. Yet the DSR is bound and determined to abandon its trolleys. Why?

"When money-making trolleys are done away with, the usual story is that buses will make *more* money, but experience proves that buses actually make *less* money, sometimes even lose money. One big factor in the change-over seems to be the greater opportunity for graft in the form of kick-backs on purchases of gasoline, oil, tires, and new buses every few years."

END OF AN ERA, an illustrated souvenir booklet, was issued to commemorate the last trip over the Hagerstown & Frederick, between Frederick and Thurmont, Md., on February 20, 1954. Photos and write-up are professionally handled. F. D. Haugh, superintendent of railways for Potomac Edison Co., Frederick, Md., which operated the H&F, writes:

"We have taken the trucks from our last trolley car, No. 172, and leased the body to the Maryland State Roads Commission for a field office."

LAST city streetcar line in western Canada gave way to buses on September 18, 1955, when the Portage-North Main route of the Winnipeg Transit Commission abandoned its rails. The only other juice line still running in western Canada is the British Columbia Electric, which operates two short interurban-type routes in Vancouver.

More recently, the final trolley lines in Brooklyn, N. Y., and Atlantic City, N. J., also yielded to buses. At the end Brooklyn had three streetcar routes: 39th Street-Church, Coney Island Avenue, and McDonald-Vanderbilt. New York City Transit System operators replaced the first two with buses, but the third was given up without replacement because McDonald Ave. is served by Independent Division subway trains.

In New Jersey, the Atlantic City Transportation Co. quit its city line on Atlantic Avenue just short of its New Year's Day deadline. Operation of the trolleys after January 1 would have cost the company thousands of dollars in annual taxes.

Thus passed New Jersey's last real streetcar line. True, PCC cars are running in the Newark city subway, but theirs is hardly a streetcar service. The only time Newark trolleys reach the surface is at their Orange Street grade crossing—which, incidentally, is a good location for taking photos.

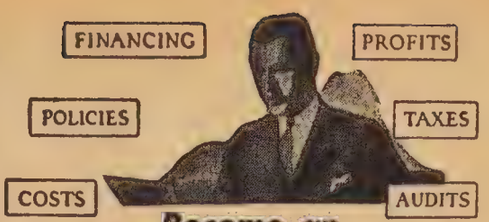
CHICAGO, AURORA & ELGIN has asked the ICC for permission to drop all of its passenger service until the road establishes a through route to the Chicago Loop.

Writes Rodger Darling, 1902 S. 17th Ave., Maywood, Ill.: "The CA&E claims it has lost $1,800,000 since it left its Loop terminal and stopped at the new transfer station 9 miles west. If it drops passenger service, most of its 400 employes will be laid off and 15,000 daily riders will be affected."

We do not know whether or not the CA&E took this action for the purpose of forcing the CTA to allow its trains to run on the new Congress Street thruway tracks, when completed.

LOSS of its District of Columbia franchise, effective next August 1, may sound the death knell of rail service now provided by the Capital Transit Company's PCC fleet. Both the District's Commissioners and the PCC want an all-bus system on the ground that the clearance of streetcar tracks will facilitate highway and traffic improvements. The bait of lower fares also is dangled before a gullible public.

RETURNS are pouring in from the Maguire Poll. We asked readers whether or not they want us to run foreign



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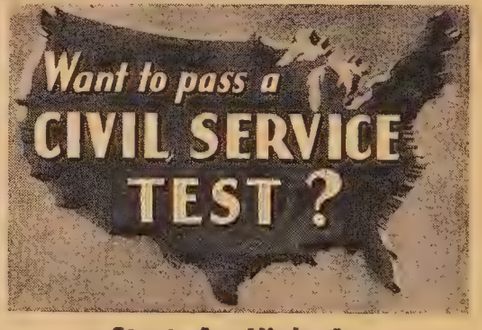

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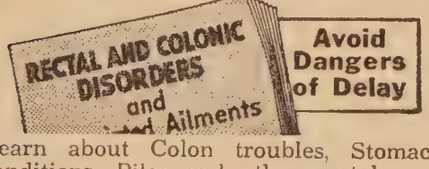

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trolley news in this department, particularly because so many North American lines have passed out. The response thus far, with a few scattering objections, is a pronounced *yes*.

MEXICO CITY now has PCC cars. Their introduction has been accompanied by the discontinuance of some less-heavily-traveled trolley lines, reports Luis Leon Torreabla, Mexico City. In most cases through-routing has been brought about and duplications of service have been given up.

Mixcoac line 81 has quit entirely, while the single-track Coyoacan line 52 yielded to buses to save time of meets on the trolley route. PCC cars are very popular with the riders, despite a fare increase (25 centavos instead of 20), comments Sr. Torreabla. They are nicknamed *peces*—Spanish for "fish"—because of the similar pronunciation, PCC's and *peces*.

JAPAN. When he was stationed at Yokosuka, reader Ralph Forty, USN, Port Hueneme, Calif., rode the exotic Enoshima-Kamakura Kanko Tramway System (the full name of a Japanese line we mentioned recently). He says that our story failed to mention that the whole line is single-tracked and on private right-of-way which is so narrow in places that there is barely room for the cars to run between buildings. Meets are arranged to the various little stations enroute. After leaving Hase station the line runs for a while along the sea and comes near the Emperor's summer palace. At Fujisawa there is an interchange with the National Railways and another interurban.

Mr. Forty also writes that the first electric railway in Asia started operation at Bangkok, Siam, on February 21,

Steve Maguire

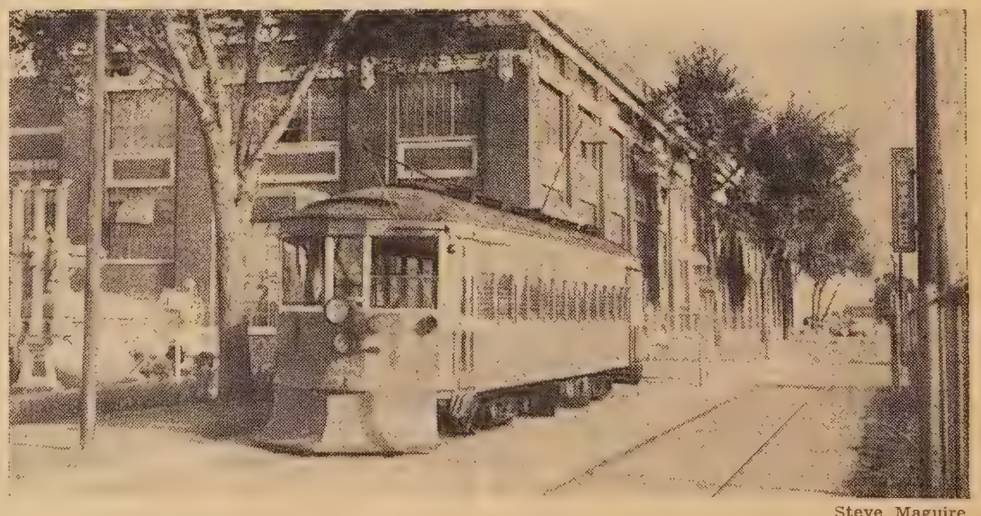
Past history: New York's 3rd Avenue Ry. car 731 under el structure.

1893 It is still in operation and has seven city lines carrying 350,000 passengers a day.

MOSCOW, capital of the Soviet Union, boasts the world's only air-conditioned city subway system. It was opened in 1935 with only 3½ miles of track but extensions have since raised the total to 81 miles, and additional lines are being built. Six lines radiate from the city's center in different directions like the spokes of a wheel. Each crosses the Great Ring, the underground line built in 1954 to connect with the "spokes."

Some people think that Moscow has the world's most beautiful city subway. There are 48 palatial-looking stations faced with marble, each one differing from the others in architectural design. However, the Russian illustrated magazine *Ogonyok* has just published an article, written by a Soviet official, asserting that these stations are too ornate and contain too much sculpture, bas-relief, panels, and mosaic. He states:

"The fashionable disease of ornamentation has gone underground." ●



Steve Maguire

Wisconsin Electric Power Co. 882 at Lakeside power plant (see page 55).

Books of the Rails

THE BIG IVY, by James McCague, 312 pages, Crown Publishers, New York, $3.50.

THIS BOISTEROUS NOVEL is based upon a nostalgic period, the turn of the century, when the men of the high iron were generally set apart as heroes. Jem Gandee is the epitome of everything that should happen to a fellow who begins as a roundhouse wiper and becomes a hogger on the Indiana Valley Line (The Big Ivy). A giant of a man, he brooked no interference in his desire for a speed record or a woman's love.

The novel, loaded with rail lingo, is made to order for those of us who wake in the wee-small hours to hear the lonesome wail of a steam whistle as a train rolls through the night.

It is our candidate for the title "the great American railroad novel."

RAILROADING IN EIGHTEEN COUNTRIES, by Carl R. Gray, Jr. (Major General, rtd., AUS), 351 pages, Charles Scribner's Sons, New York, illustrated with photos, $5.

This account of the Military Railway Service of the United States Army, covers almost a century. The bulk of it is devoted to World War II and records the achievements of the men and women of the MRS. The author, a retired major general with a distinguished rail career, has done an able job of presenting a factual report in readable fashion, with some excellent photos.

HISTORY OF THE BROTHERHOOD OF MAINTENANCE OF WAY EMPLOYES, by D. W. Hertel, 308 pages, Ransdell, Inc., Washington, D. C., $3.50.

"Conceived in want and born of necessity," this great Brotherhood has achieved a high place, and the book presents an honest documentary of the turbulent times that brought it about. Written under the direction of the union's president, T. C. Carroll, it spans 68 years of labor-management adjustment, which is interesting to students of labor history as well as a great many railroaders. However, too much space is taken up with details of internal organization which have little or no appeal to the general reader. Some of the photographic illustrations are quite good.

SOUTHERN PACIFIC'S FIRST CENTURY, Southern Pacific Bulletin, San Francisco, Calif., 106 pages.

A commemorative booklet in honor of the opening of the 23-mile Sacramento Valley Railroad, which began operations in 1856 and later became the massive Southern Pacific, with 13,459 miles of railroad in eight states. The text is rather routine, but the many choice photos bring it alive.

THE RAILROAD POLICE, by H. S. Dewhurst, Charles C. Thomas, publisher, Springfield, Ill., 211 pages.

An interesting account of railroad police, with a brief history of their background and development, a review of current employment requirements, and a run-down on their duties. A technical work for police officers, the book should interest railfans also.

The story of American railroads is told in attractive illustrated booklets which may be obtained free of charge from the Association of American Railroads, Public Relations Department, Transportation Bldg., Washington 6, D. C. Each was designed to help the American people to know more about the railroad industry and its major role in the nation's life. Because the supply is limited, not more than five booklets will be sent to any individual.

List of Maps Showing Railway Lines: 24-page reference list for serious students of rail history.

Research Center, A.A.R., Annual Report for 1955: 44 pages of technological advances in the railroad industry, for scientific readers only.

Highlights of American History: Cartoon story, important events in American railway history.

Quiz on Railroads and Railroading: Hundreds of questions and answers about the history, growth, mileage, equipment, investment, organization, employment, and operations of American railroads.

The Railroad Story: Progress of American railroads, with emphasis on technological developments.

The Railroad Land Grant Legend in American History Texts: Federal land grants to railroads and benefits received by the Government.

American Railroads—Their Growth and Development: Includes a series of maps showing the expansion of the railroad system by ten-year periods.

Ride the High Iron: Picture-story of America's modern passenger trains and vacation travel.

Railroad: Reprint from *World Book Encyclopedia* of an illustrated article on American railroads, their growth and development.

Inside Railroading: Many things the public does not usually see.

Quiz, Jr.: Juvenile edition of *Quiz on Railroads and Railroading.*

Railroads Deliver the Goods: Cartoon book in color describing freight-train operations.

A Chronology of American Railroads: Important dates in American railway history and railway mileage in each state in ten-year periods from 1830.

Rails Across America: Cartoon story of the railway development.

Bibliography of Railroad Literature: Titles, authors, publishers, and prices of many books and periodicals relating to the American railroads.

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ALAN BERNER, 28 Lancaster Ave., Baldwin, N. Y., sells many pix elec. lines, Korea, Japan, U.S., Canada, or trades for negs. Info., 3c stamp.

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JIM BURCHARD, Box 437, Short Beach, Conn., sells 8X10 pix T&T open-platform car 12, $1.50 ea.

BURDELL BULGRIN, Box 206, Owen, Wis., will trade DM&IR and Soo tr. orders for other roads. Will sell DM&IR, Soo, GN, UP steam pix, 14 for $1. Also Powerama pix, 8c ea.

ARCHIE CARTER, 715 S. Oakes St., Tacoma, Wash., wants to hear from fans interested in special train for PGE opening and CNR trip to Kitimat in mid-June.

HERB CEARLEY, 706 W. Caldwell, Compton, Calif., wants pix and plans of Cent. Pac. frt. and pass eqmt.

Old signal tower on the Philadelphia & Reading at Phoenixville, Pa.

DAVID CHAMBERLAIN, 415 E. Vine St., Union City, Tenn., will buy steam pix NC&STL, GM&O. Wants to hear from teen-age fans.

JOHN CLARE, Box 55, Amsterdam, O., sells 10 NKP pc. size steam W&LE Div., $1 ea., or trades for other steam pix.

LARRY COHEN, 2155 Grand Concourse, New York City, N. Y., sells steam pix many roads. List, sample, 10c. Buys negs., any size, CNJ, PRR, LIRR, NYC, on approval.

JOHN DADZIE, The F.C.G. Church Biseasi, Via Salt Pound, Gold Coast, Africa, age 16, interested in rr. pix and stamp collecting. Wants pen pals.

JOHN DAVIS, Box 42, Locke Mills, Ma., buys CN, GT, GTW, CV, DW&P negs. Buys any pix or negs. GTW, 3706. Sells pix GT cabooses, lineside views, various sizes.

DAVID ENGMAN, Box 7073, El Paso, Tex., wants negs. B&M, CV, Mexican, others.

MARK EZELL, 233 Carrollton Ave., Shreveport, La., wants to correspond with other telegraphers.

LEONARD FAIRCHILD, 823 W. Montgomery, Spokane, Wash., will buy pc. pix locos, trs., trestles, tunnels, depots, etc., any rd.; write first.

TED GAY, 156 Van Buren Ave., Teaneck, N. J., has many extra 8 mm. titles for rr. movies he'll give free to anyone. Also trades footage. Wants scenes of *Hiawatha, Calif. Zephyr*, SP cab-aheads, Frisco's Oakland ferries, etc.

W. O. GIBSON, 1501-A Ong St., Amarillo, Tex., is discontinuing correspondence.

CHAS. GOETHE, 1108 S.E. 7th St., Lauderdale, Fla., will sell rare size 116 trolley negs. List, 3c stamp.

TOM GRAY, 1120 Chula Vista Ave., Burlingame, Calif., sells pix, size 616, steam and elec., U.S., Canada. 10c ea. Has about 10,000 in collection.

D. C. HALLET, 25 Norman Close, Romford, Essex, England, will trade English tts. for those of USA.

WALT HARRIS, 45 W. Elm St., Stockton, Calif., will sell back issues *Railroad Magazine*, *Trains*, *Baldwin Locos.*, model mags., emp. tts. List, 6c stamp.

C. A. HEATH, 17 North St., Willimantic, Conn., will buy caboose pix LIRR, Rutl., also Huntington & Broad top caboose 17, coach 14, flanger 75, toolbox X3, flat X4, cranes 3.

JAMES HICKEY, Box 745, Echo, Ore., will sell compl. set *Railroad Magazine*, Dec. '29 to date, to highest cash bidder of $100 or more. Will not break set. All mags. unclipped, good cond., except 3 prior to '35 have no covers. Will ship frt. or express collect.

DAVID HOLWAY, 46 Hope St., Attlebord, Mass., will sell B&M, CV steam and diesel negs.; B&M, New Haven, CV steam pix. List, 5c.

JOHN ILLMAN, 902 Logan St., Alton, Ill., trades or sells emp. tts.; will sell *Railroad Magazine*, Feb., Mar., '54, new cond., 25c ea.; list for 3c stamp or your list.

W. C. JANSEN, 6468 S. Dante, Chicago, Ill., will sell bound vol. July-Dec. 1907 *Elec. Ry. Review* for best offer.

ROBT. JONES, JR., 197 Ferndale Ave., Stratford, Conn., will sell B&M loco bell and yoke, $65. ($75 FOB crated.)

ARNOLD JOSEPH, 2512 Tratman Ave., sells and fills orders for all back issues *Railroad Magazine*, other rail or model mags., incl. *Bald. Locos.* List 3c stamped env.

E B. KILLE, 8215 2nd Ave., Inglewood, Calif., will sell size 116 prints from hundreds of roads, 15 for $1. List, 3c stamp.

SHELDON KING, Box 411, State Univ., Teachers College, Geneseo, N. Y., sells size 616 trolley pix. List, 2c stamp.

(Mr.) RENE KLEMENS, (French railwayman who writes in English), cite Belle Beille, Batunat, M1-208, Anjou, Marne et Loire, France, wants to correspond with North American railroaders.

H. M. KNIFFEN, Box 81 Poughquag, N. Y., sells pix, pc. and 5X7, locos and eqmt., many roads. List, 10c.

TOM KOPRIVA, 1648 S. Pulaski Rd., Chicago, Ill., sells 1952-'55 tts. U.S., Canada, Alaska, British, good cond. Details, 3c stamp.

LARRY LASTRUCCI, 5 Robert Rd., Orinda, Calif., sells pix SP, AT&SF, WP, T&NO, many short lines, 25 for $1 or 150 for $5.

WOODROW LAWYER, 545 Broadway, Hanover, Pa., will pay $1 ea. for good pix WMd G7 4-6-0-nos. 101 thru 105, any size.

FRANK LESLIE, 123 Lake Ave., Red Bank, N. J., sells loco pix PRR, CNJ. List, 2 samples, 15c. Will sell May '96 *Off. Guide*. Wants CNJ steam negs., aso CNJ or PRR name plates, marker lights, whistles.

WALTER LEWIS, Jr., 341 Claire Pl., Menlo Park, Calif., will buy British Rys. steam and elec. photos.

DICK LIND, 1801 Baseline Rd., Boulder, Colo., wants info on NKP, W&LE. Buys pix, slides, negs., maps, etc., of same.

L. G. LOWE, 202 Rogan St., Kingsport, Tenn., will sell 243 bldr. pix steam locos, back issues *Railroad Magazine*, O gage scale layout. Details, 3c stamp.

GLEN MADER, 805 Neck St., Angelo, Tex., will sell back issues *Railroad Magazine*, *Trains*, *Model Craftsman*, all good cond., rr, books, steam thresher cat. List, 3c stamp.

R. MAINWARING, 90-03 75th St., Woodhaven, N. Y., will buy tr. ords. from Flor. & Cripple Creek, Golden Circle RR., T&T, Golconda & Adelaide, Ton. & Deadwood.

CLEM MARTIN, 1843 16th Ave., S. Birmingham, Ala., will buy steam negs. PRR, NYC, B&O, Erie. Write first.

JERRY MELBINGER, Box 272, Owen, Wis., will buy tts. and negs., any rr., good cond.

ALLEN MILLER, 1836 Gardena Ave., Glendale, Calif., will buy bldr. pix SP, PRR steam locos; write first.

J. F. MONHOFF, 524 E. Marigold St., Altadena, Calif., will sell AT&SF, SP, SN, PE, McCloud River, Feather River, Quincy, GN, many log roads. Send for list.

D. C. MOORE, 1417 Nantucket Dr., Houston, Tex., will sell back issues *Railroad Magazine*, *Trains*, model mags., *Trains* albums, etc. List, 3c stamp.

DON MOORE, 24726 Delwood Dr., Mt. Clemens, Mich., will buy pix Mich. and Ohio elec. interurbans taken before 1930, or trade for DVR, ME.

TIM MOORE, 916 Central Ave., New Providence, N. J., will sell headlight of CV steam loco 402, $25.

IRA MORRILL, rail photog., contact John Westphal, 934 Watson Ave., St. Paul, Minn.

KEN NIMS, 678 Bernardston Rd., Greenfield, Mass., will trade NP, Burl., LV, C&NW tts. all 1905, for old B&M and other tts.

J. J. O'NEIL, 87 Industry St., Pittsburgh, Pa., will buy old brass switch locks and keys, pix of D&H locos 434, 438, loco number plate 87.

WM. O'NEILL, 232 Vine St., Honesdale, Pa., will sell *Railroad Magazine*, exc. cond., 1 ea. of '41, '42, 6 of '44, comp. yrs. '49, '51, '52, '53; lot $7.

(Mr.) KWESI OTOO, Odumasi St., Biseasi, via Essiam, Gold Coast, British West Africa, wants rr. pen pals.

J. C. RANEY, Box 5, Chula, Mo., wants pix Milw. Rd. S-2, S-3, F-6, F-7, 0-8-0 steam power; offers in trade Rock Is. steam pix.

HAROLD REEVES, JR., 25720 Odetle Rd., Flat Rock, Mich., wants any DT&I historical, anecdotal, pictorial material.

NORMAN REINHARDT, 896 Main Ave., Passaic, N. J., wants negs., tts., etc., French, Italian, Swiss, Polish, German rrs. Will swap U.S. negs., and tts.; state wants.

F. W. SCHLAAK, 301 Tompkins St., Fond du Lac, Wis., will sell various issues *Railroad Magazine* from Jan '40, *Trains* from Jan. '47, all good cond., 20c ea., 6 for $1. Send for list.

KARL SCHLACHTER, 112 Laurel Lane, Forest Brook Glen, Wilmington, Dela., sells P&R, LV, L&HR, B&O, Erie, CNJ, D&H, DL&W p.c. pix, many camelbacks, 7 for $1.

A. A. SCHLIESKE, 6424 S. Komensky Ave., Chicago, Ill., will sell *Off. Guide.*, Sept. '51, 1000th edition, Nov. '52, Apr. '53, Nov. '53, Feb. '54; Nov., Dec. '54 all good cond., $1 ea. postpaid.

G. W. SCHRODER, 89-25 Elmhurst Ave., Elmhurst, N. Y., will sell book *Practical Evaluation of RR. Motive Power*, 1948, by Kiefer, like new, $2 postpaid or swap for any 15 fare tokens.

A. E. SCHULTZ, (NKP gen. roundhouse foreman), 4002 W. 30th St., Indianapolis, Ind., will sell or trade 2¼X3¼ microdol-developed negs., prints, steam locos only.

VERNON SEAVER, 7742 Haskins, Chicago, Ill., will sell over 1400 size 616 negs., still and speed, taken '39-'42, $500; incl. NP, SP, AT&SF, MP, Frisco, L&N, all rds. out of Chi., sht. lines, many others.

A. R. SHADE, Jr., RFD 2, Columbia Station, O., will sell p.c. prints of B&O, CNR, CPR, NYC, etc., steam only, 12c ea. on approval. Also p.c. size prints BCERY, CTS, CSL, CTA, CRT, MTC, etc., 12c ea. on approval.

J F. SMITH, 6920 S. Shore, Chicago, Ill., will sell *Railroad Magazine*, '33-'43, *Trains*, '45-'51; loco negs., pix.

WARREN SMITH, 195 Holbrook Rd., North Quincy, Mass., will buy bldr. blueprint of Lima A-1 or B&A 1400-1444 series.

ART SPEIGHTS, 26 Perry St., Wickford, R. I., wants pix and info. Fla. trolleys, esp. Tampa.

R. P. STAIR, 404 W. Hill St., Champaign, Ill., trades, sells emp. tts. List, 3c stamp.

WALLY STEIGERWALD, Cobb Hill, Amora, Ind., buys FEC emp. and public tts, steam pix, rosters, steam loco info, rule books from 1910 to present. Wants to hear from FEC engrs.

A. E. STENSVAD, 811 E. 3rd, North Platte, Neb., will sell sizes 616, 122 up, steam negs., 616 Kodak monitor 122 Zeiss Ikon.

J. A. STOKES, 3958-50 Hill St., Los Angeles, Calif., will buy p.c. pix, negs., of trains, steam locos, maps, Mexican tts. prior to 1905.

CHAS. STROUBSOLE, 22 Ontario St., Brantford, Ont., Canada, sells pix sizes 616, 120, steam and elec., LE&N, CNR, etc. List, 2 samples, 25c.

JACK SWANBERG, Berkshire School, Sheffield, Mass., will buy all-time New Haven loco roster. Write first.

TED TAETSCH, 12913 Matherson Ave., Cleveland, O., buys, sells, trades trolley pix, esp. Shore Line Elec.

FRED THOMSON, 4205 E. 41st St., Kansas City, Mo., will trade 200 steam and interurban tts. for trfs. from aband. trolley lines.

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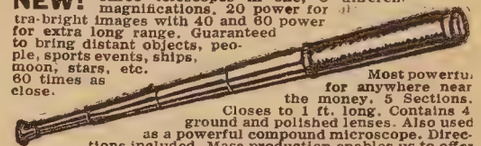

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ED TYRRELL, 131 E. Duval St., Philadelphia, Pa., will buy action pix or negs., any size, PRR T-1 4-4-4-4.

JOHN WEIGHTMAN, Box 696, Sacramento, Calif., will sell pix, size 124, open-air Sacramento st. car 15, taken over 40 yrs. ago, 20c ea.

DAN WENK, 734 Holly Place, West Covina, Calif., wants 8X10 pix n.g. lines.

PAUL WESTBROOK, Jr., 305 Wordsworth Ave., Altoona, Pa., will sell set of 13 pix aband. A&LV elec. lines, sizes 116, 4X5, incl. 9 taken on last run, $2.

GARY WILSON, 353 Penn St., Pasadena, Calif., will sell CERA *Bulletin* '47, best offer. Wants pix Okla. Ry. No. 216, Bamberger RY, 304. List and PE sample, 10c

C. W. WITTBECK, Box 970, Hammond, La., has compl. new list over 1000 p.c., 5X7, 8X10 prints. List of negs. also available. Specify which wanted; send 3c stamp.

RUDOLPH WITTEMANN, 529 E. 22nd St., Brooklyn, N. Y., will sell or exchange *Railroad Magazine*, Apr., May '47; June '46; Jan., Mar. thru Aug., '45; Jan., Aug., Sept., '44; all '43; also some early issues *Trains, Ry. Age, Ry. Progress.*

WADE WOLFE, Box 2054, College Place, Wash., will sell 131 issues *Railroad Magazine*, incl. all '35 exc. Jan., Feb., Oct.; all '36 thru '41; all '42 exc. Nov., Dec.; all '43; all '45 exc. Dec.; also '49 Jan., Mar., May, Aug., Oct., all good cond. exc. covers missing on Jan., Feb., '36; June '35. Prefers to sell only in lot, $30 plus shipping cost.

VINTON WRIGHT, 3803 Krug Ave., Omaha, Neb., sells rr. recordings, tape and disc; write for list.

ROBT. YANNEY, c/o J. C. Bilson F.C.G. Church Biseasi, via Essian, Gold Coast, Africa, age 25, collects pc., rr. pix. Wants pen pals, male or female.

MODEL TRADING POST

DOUG. BERGREN, Box 155, Wilcox, Neb., will sell HO scale 4-4-0 and tender, cost $40, perf. cond., $20, or trade for old *Railroad Magazines*. Write for info.

HOWARD BLACKBURN, 402 Hayburn Building, Louisville, Ky., will sell *Lionel Magazines* '33, '34, '35, '36; also Lionel cats. '37, '41, '42, '50-'52; aso AF cat. '46; to highest bidders.

S. MAHOLY, 2300 W. 21st St., Chicago, Ill., will sell original Ives 1915 cat. compl. $35.

MICKEY POOLE, Box 161, Hillsville, Va., will sell Marx elec. trains, eqmt., good cond.; write for info.

CARL ROBINSON, 7303 Hermitage St., Pittsburgh, Pa., will trade *Model R'der* '34 thru Oct. '55; Lionel scale 2900 series frt., for old trains, trolleys, cats.

ALLEN SHARP, 100 Schennecossett Pkwy., Groton, Conn., will trade set 15 BAR tr. orders for surplus HO kits, parts, model rr. mags.

L. K. WISMER, 50 Reliance Rd., Souderton, Pa., will sell or trade for DC slightly used O gage trolleys with Pittman motors. List, 3c stamp.

STEAM POWER

MODERN steam locomotives are "cheaper in the long run," according to Beyer, Peacock & Co., Ltd., locomotive builders of Manchester, England, which cite the following reasons: (1) low first cost, (2) use of local cheap fuel, (3) easy repair and operation, (4) long life, (5) remarkable elasticity of duty and performance, and (6) rugged construction and unequalled reliability.

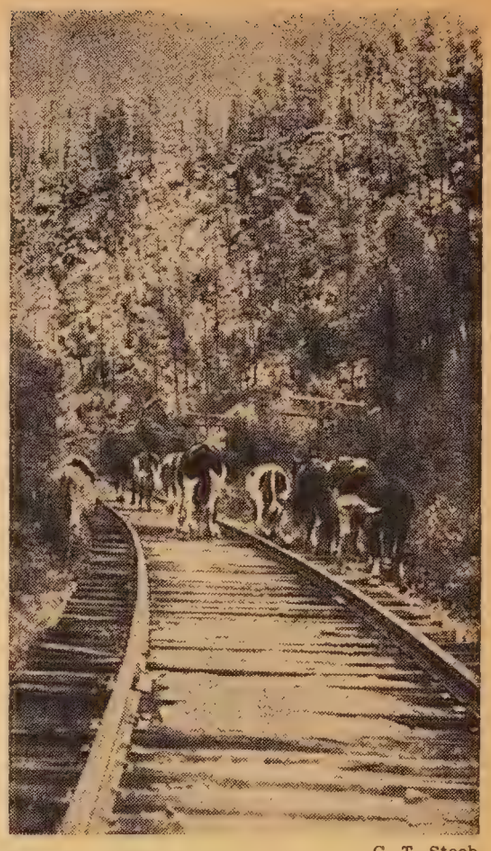
Some lively "corpses" are chuffing and puffing their way around in Michigan's booming railroad business.

The old steam locomotive, slated for the scrap heap with the change to diesels, has won a reprieve because of soaring demands.

And though the funeral is only delayed, lovers of steam are happy to see their favorites still in action. The Michigan Central, for example, reports its Michigan Division is still operating ten steamers.

Michigan isn't the only place where steam engines are being taken out of mothballs and put back to work. The same is happening in many parts of North America. We hear from Don Degner, 304 S. 94th St., Milwaukee, Wis.:

"A Milwaukee Road official tells me: 'Our traffic volume has increased so much that we have had to put 16 steam locomotives back into service at Milwaukee and Savanna, Ill., and on local road service between LaCrosse, Wis., and Minneapolis.' The list includes 1478, 1505, 1531, and 1535 (all 0-6-0); 935, and 903 (both 2-6-2); 414, 417, 481, and 489 (all 2-8-2); 1258 (2-8-0), and some 4-6-0's in the roundhouse for cleaning and repairing. I have also seen a few 4-8-4's on the Milwaukee."



C. T. Steeb

Rustic scene on South Dakota's crooked old Rapid City, Black Hills & Western line, before it was abandoned, showing why the locomotive pilot used to be called the "cowcatcher."

Robert Kline, 250 South St., Minersville, Pa., writes: "Passing Shamokin, Pa., recently I saw a train of 100 ore cars powered by five 2-10-0 and 2-8-0 steam engines—two pulling, three pushing—en route to the Lehigh Valley's Mt. Carmel yards. All five are owned by the Pennsy and kept in Shamokin for daily use because of the heavy grade from there to Mt. Carmel."

Boston & Maine has been keeping 16 steam locomotives in service, reports Jimmie Adie, 8 Edwards Ave., Methuen, Mass. He says he learned it from the road's Public Relations department. The engines are: 622, 3713 and 4113 (used for snow removal this past winter), 4 of the 1400 series (Boston-Clinton), 8 of the 3600 series (Boston-Bedford), and one 3600 (stand-by at Lawrence).

Engine 2248, the SP's oldest active steamer, pictured in Feb. issue, was used on snowshed lines over Donner Summit, reports Maurice Powell, Box 3063, Temescal Sta., Oakland, Calif. She had 2 steam gages mounted on her boiler jacket, one on each side of sand dome.

The following steam-power list was compiled from reports sent us by Jim Adie, Robert Anderson, Wm. Swartz, Ed Emery, Stuart Baker, Austin Cross, Martin Jergens, John Davis, Roger Breslow, Myron Braun, O. C. Steele, and Chas Axthelm. Previous lists have appeared in *Railroad Magazine* since Jan. '55. We cannot, of course, guarantee their accuracy.

Baltimore & Ohio currently lists over 600 steam locos on its roster, most of them still in service.

Canadian National Railways, Spadina Shops, 200 steamers.

Canadian Pacific is using 4-6-0 types at Ottawa. Steam may still be found on the CPR in Maine between Jackman and Greenville Junction. In British Columbia CPR 2-8-2 locos are handling freight, 2-8-0 and 2-10-0 types handle extra freight, 4-6-4 Hudsons and 4-6-2 Pacifics handle some passenger runs.

Chicago & North Western is using an 0-6-0 switcher at Ironwood, Mich.

Grand Trunk Berlin Subdivision trains 16 and 17 are powered by 4-8-2 and occasionally 2-8-2. A 2-6-0 is stored at Island Pond, Vt.

Little Howard Terminal in Oakland, Calif., has a 2-6-2 saddle-tanker in storage in its engine shed.

On the Waybill—Next Issue

THIRD AVENUE EL, steam and juice, by E. J. Quinby; many photos.
ON THE NIGHT WIRE, by Harry Bedwell, a fiction classic.
I MARRIED A TRAIN DISPATCHER, by Grayce Josserand, now working with him on the Western Pacific.
LOCOMOTIVE ROSTERS of three interesting short lines.
PLUS other lively articles, short hauls, plenty of pix, your favorite departments, and a beautiful Western steam cover.

FLAGSTOPS

CASEY JONES'S steam whistle is now owned by Howard E. Robertson, Bon Terre, Mo., who often visits Casey's widow and his last fireman, Sim Webb.

He reports that the widow, aged but still sprightly, had a bad hip accident some time ago. She helps to support herself by crocheting pretty doilies, into each of which she puts 60c worth of thread, selling them at $1 apiece. Any reader who wants a souvenir of this kind should send $1, plus 6c postage, to Mrs. J. L. (Casey) Jones, 147 Union St., Jackson, Tenn., and she will send him a round or square doily and an autographed card telling facts about the Jones family.

THRILL OF LIFETIME. For the first time in more than a year, a steam locomotive ran the other day on Northwestern Pacific tracks. At the throttle was retiring Engineer Willis A. Silverthorne of Sausalito, Calif., climaxing his 45-year career with the NWP. With him rode his son Marshall, NWP fireman. The locomotive was old No. 2248.

The trip, sponsored by the Railway & Locomotive Historical Society, Pacific Coast Chapter, drew about 250 railfan passengers from the San Francisco Bay area. They rode in four early railway coaches, making picture stops, a luncheon stop, and a visit to Fulton, where Fred A. Stindt presided at a meeting which honored the retiring hogger. The consist also included an old-style baggage car equipped with some of the last genuine gas lamps in existence.

FANTRIPS scheduled jointly by R&LHS and SCC: March 18, Ventura County RR.; April 22, Mojave Northern (members only); May 20, Southwest Lumber, Flagstaff, Ariz.

SACRAMENTO VALLEY RR., the West's pioneer railroad, Folsom to Sacramento, is featured in photos, history, map, locomotive roster, etc., on large three-color 1956 calendar issued on a non-profit basis by the Railroadians of America, Pacific Division, 1500 Chanslor Ave., Richmond 5, Calif. Priced at 50c each.

Previous calendars still available at same price are V&T (1946), South Park Line ('47), Mt. Gretna Narrow Gage ('51), Overfair RR. ('54), and Arcata & Mad River ('55).

WORTH VISITING is the Rail City Museum at Sandy Creek, N. Y., on scenic highway route 3. This is one of America's first steam-operating railroad museums. Opening last July 4, it drew some 30,000 visitors during its first two months and is still a very popular attraction for the railfans.

"On June 6, 1954, we made the last steam passenger run on the New York Central," writes Dr. Stanley A. Groman, the museum's president, 1303 Midland Ave., Syracuse, N. Y. "H&BT engine 38, which made that run, is under cover at our museum. We have 1¼ miles of track on which we operate Bath & Hammondsport engine 11, also hand cars, gas cars, etc. Displayed are actual reproductions of NYC facilities and 16 locomotives, ranging from 19 to 100 tons. We also have the last Scranton, Pa., streetcar and Clarence Root's entire picture collection, covering 70 years of railroad history."

PACIFIC RAILWAY JOURNAL'S special issue of Fall '55, with 24 large pages, beautifully illustrated, features "Death Valley Scotty's $5,000 Ride," "Cinder Trails Across the Rockies," and a railroader's "Experience with Velocipedes, Motor Cars, and Rush Cars on Rails." This attractive magazine is a two-color job printed on good paper. "Due to high printing costs, it is priced at $1 a copy," says Donald Duke, editor, 2304 Melville Drive, San Marino, Calif.

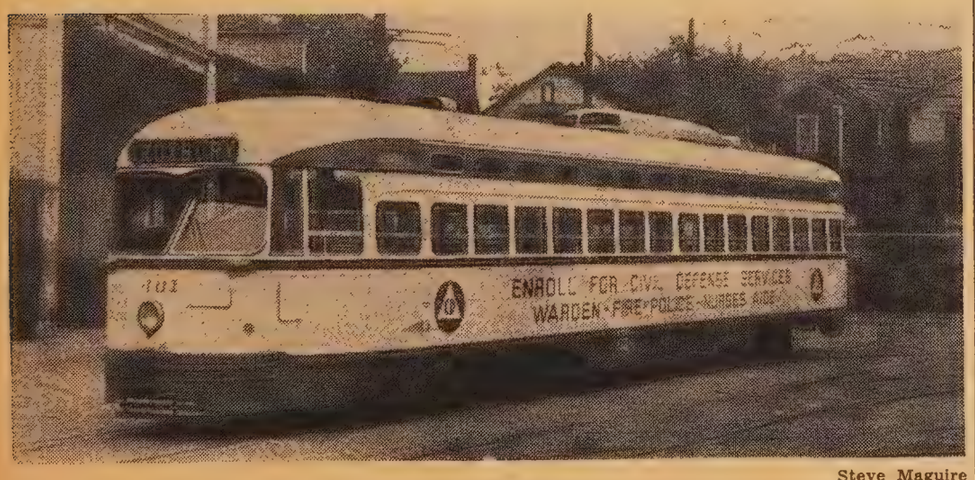
CARL FALLBERG'S *Fiddletown & Copperopolis* cartoons, which delighted *Railroad Magazine* readers for years, will be published in a hard-cover book this spring by Hungerford Press, according to *Narrow Gauge News*.

Narrow Gauge News is issued nearly every month by Bob Richardson and Carl Heflin at Narrow Gauge Motel, Alamosa, Colo. It is sent free as issued on receipt of 6 self-addressed, stamped, business-size envelopes. Back copies, 10c each.

AMERPO, a society for those interested in Railway Post Offices or mail trains, issues a news sheet, *The Section Supplement*, edited by Bryant A. Long, author of book *Mail by Rail* and occasional contributor to *Railroad Magazine*. AMERPO secretary is Dick Bush, Brandywine Box 96, Schenectady 4, N. Y.

KATE SHELLEY (see page 46) will be honored July 6, the 75th anniversary of her heroism, when a special C&NW train runs out of Chicago to Iowa for a celebration.

Miss Elizabeth O. Cullen, librarian, Association of American Railroads, is compiling a Kate Shelley bibliography. Recently she visited Boone, Iowa, with C. H. Anderson, general sec.-treas., Order of Railroad Conductors, and Fred C. Hensen, administrative editor of *The Conductor and Brakeman*, to plan the big event. Midwest railfans in large numbers are expected to take part.



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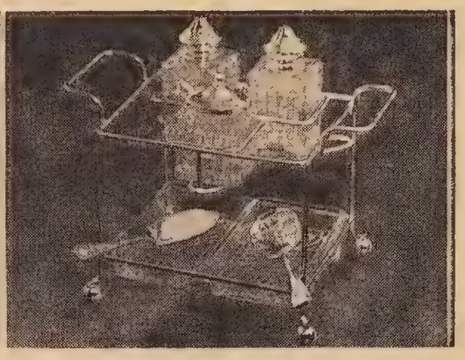
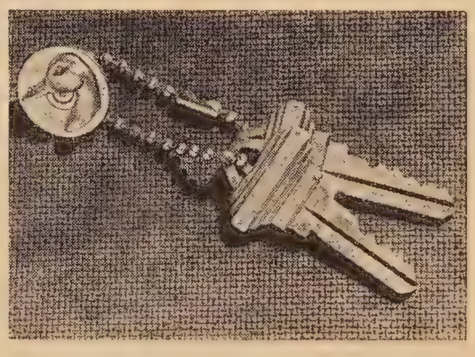
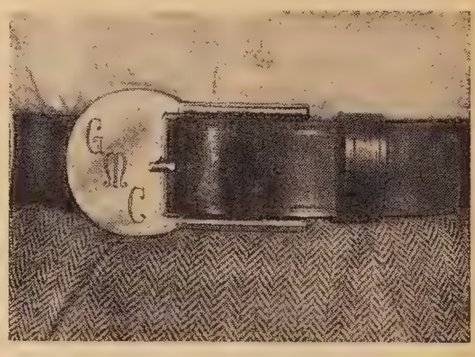


There's little you can give a woman that she'll like more than something in silver—particularly when it's imported from Sheffield, England. This is a silver-plated English table set with cut glass holders for salt, pepper and mustard (on top), glass trays for butter, cheese, jam etc. Stands 6" high, 7" wide. Complete with spreaders, $8.95 ppd. Gerard, 329 East 65th, N.Y.

This is an unusual shaving brush which has just been placed on the market. It has a strong Du Pont nylon handle which will hold any lather shaving cream. A twist of the handle and enough cream is fed from the handle to the brush for one shave. Shaving cream stays fresh and soft in patented handle. With pure badger brush top, $7.95 ppd. A. E. Hartmann, 25 West 68th, New York.



It's a key chain, alright, but a particularly nice one for anybody who likes to hunt. Made from the base of an actual shotgun shell, it has a very nice reproduction of a bird head on it. They include (be sure to specify your choice) pheasant, quail, canvasback and mallard. Heads are metal and firmly mounted on shell base. $1 ppd. B. Gately, 335 East 31st St., New York, N.Y.



Reason this is called the "change about belt" is the silver or gold colored metal buckle that can be quickly changed from one belt to another. Buckle comes plain or with monogram (specify). Polished leather belts come in black, tan, red, navy, yellow, orange and turquoise. Sizes 22-32 with buckle $1.95. Additional belts without buckle $1 ppd. Ruth Brawer, Box 4035-AR, Tucson, Ariz.

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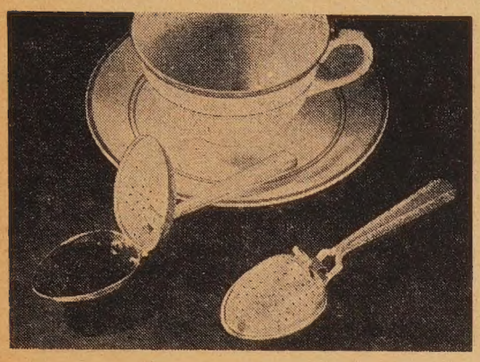
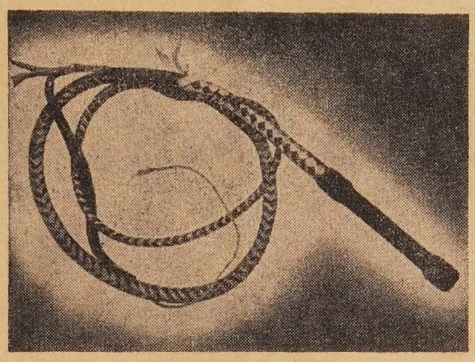
There are a couple of good things about these mugs—they are well made and worth the price, and the reproductions of old cars on them are accurate. Handles and rims are trimmed in 22 karat gold, and your name is engraved in 22k across the front (print clearly). Early cars reproduced are Cadillac, Ford, Olds and Packard (specify). $4.95 ppd. Lord George, 1270 Broadway, New York.

SHOP BY MAIL

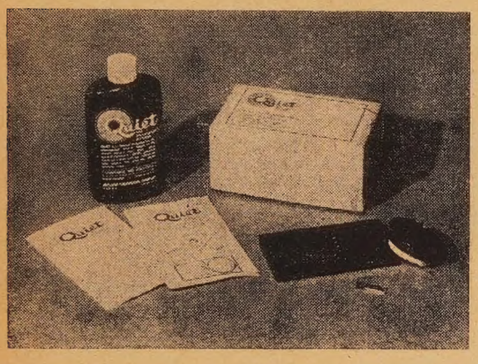
All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.



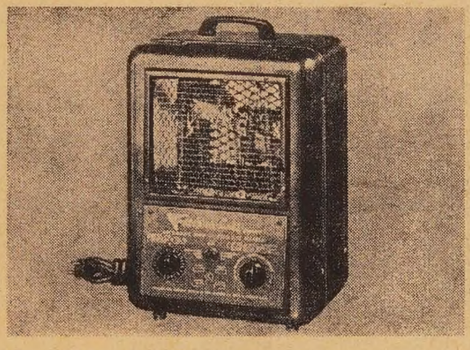
Some 100 million pounds of tea are sold in the U.S. each year. A pound makes 250 cups—hence, 25 billion cups of the stuff is downed. To make just one cup, however, you fill this covered perforated spoon with tea, snap it shut and stir in a cup of hot water. Silver-plated, imported from England; a nice gift for the money. $1.95 ppd. K. D. McLean, Box 991 Grand Central Sta., New York, N.Y.



You're looking at an authentic old-time Western bull-whip (like the ones stagecoach drivers used) complete to weighted swivel handle. You can really twirl this one and it makes a terrific crack. Top-grade calf is 8-plaited, whip is balanced for accuracy. Ornamental; real craftsmanship; a good price. 6-ft., $7.95; 8-ft., $9.95. Arms & Weapons, 40-B East 40th St., N.Y.



Item above is called "Quiet" and if you'll apply it to your phonograph records it will prevent the "pops" and "ticks" that you often get from them. One bottle is enough for both sides of 200 records, and it will keep them clean, prevent static, needle hiss and surface noises. With case, applicator, needle brush, $2 ppd. from Garde Products, Box 255, Flushing, New York.



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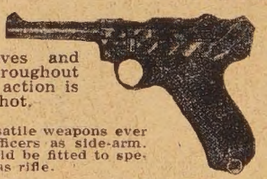

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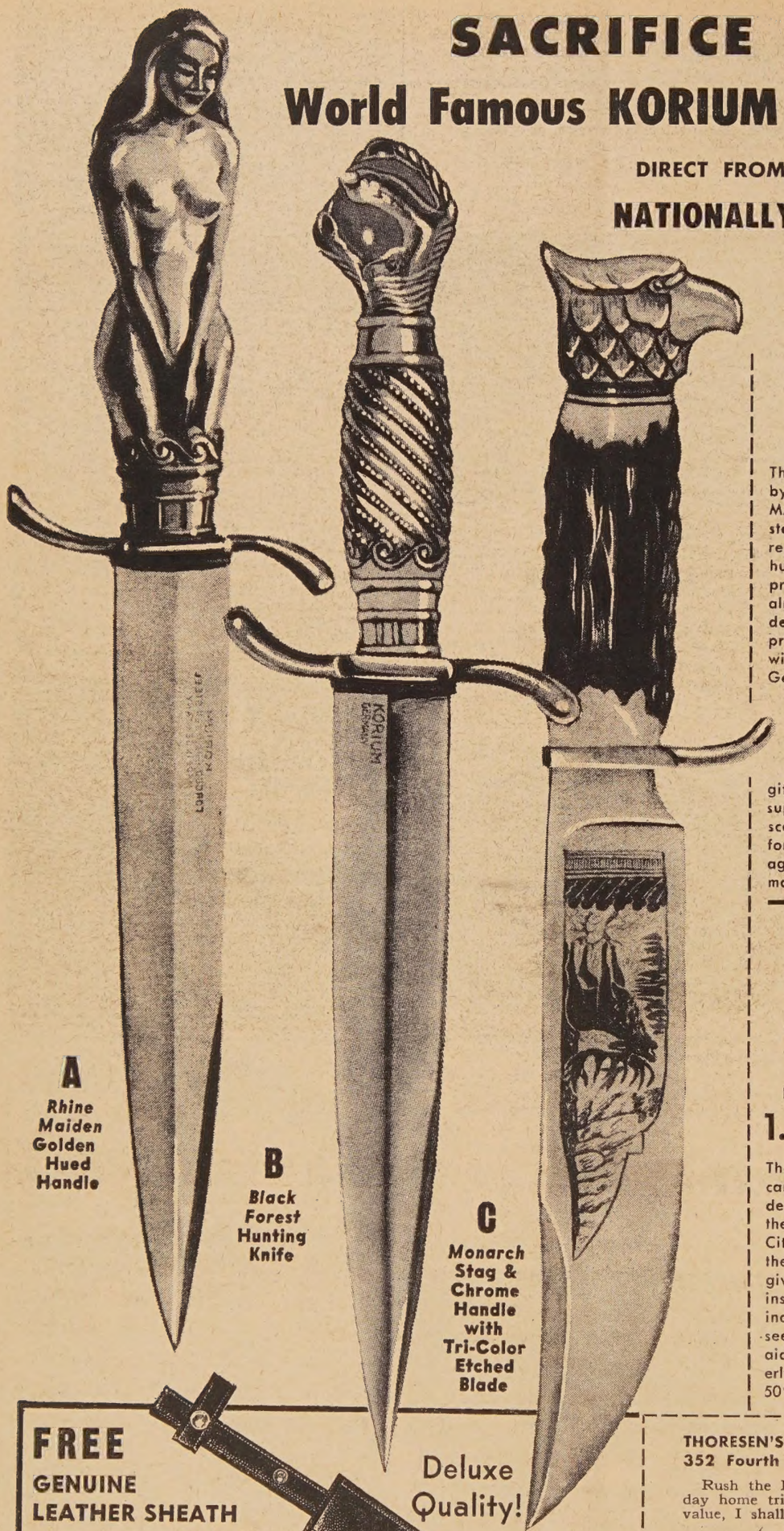

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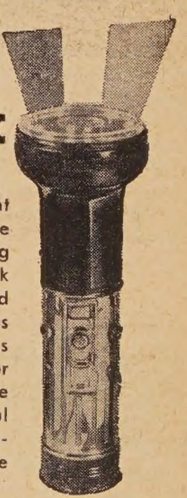

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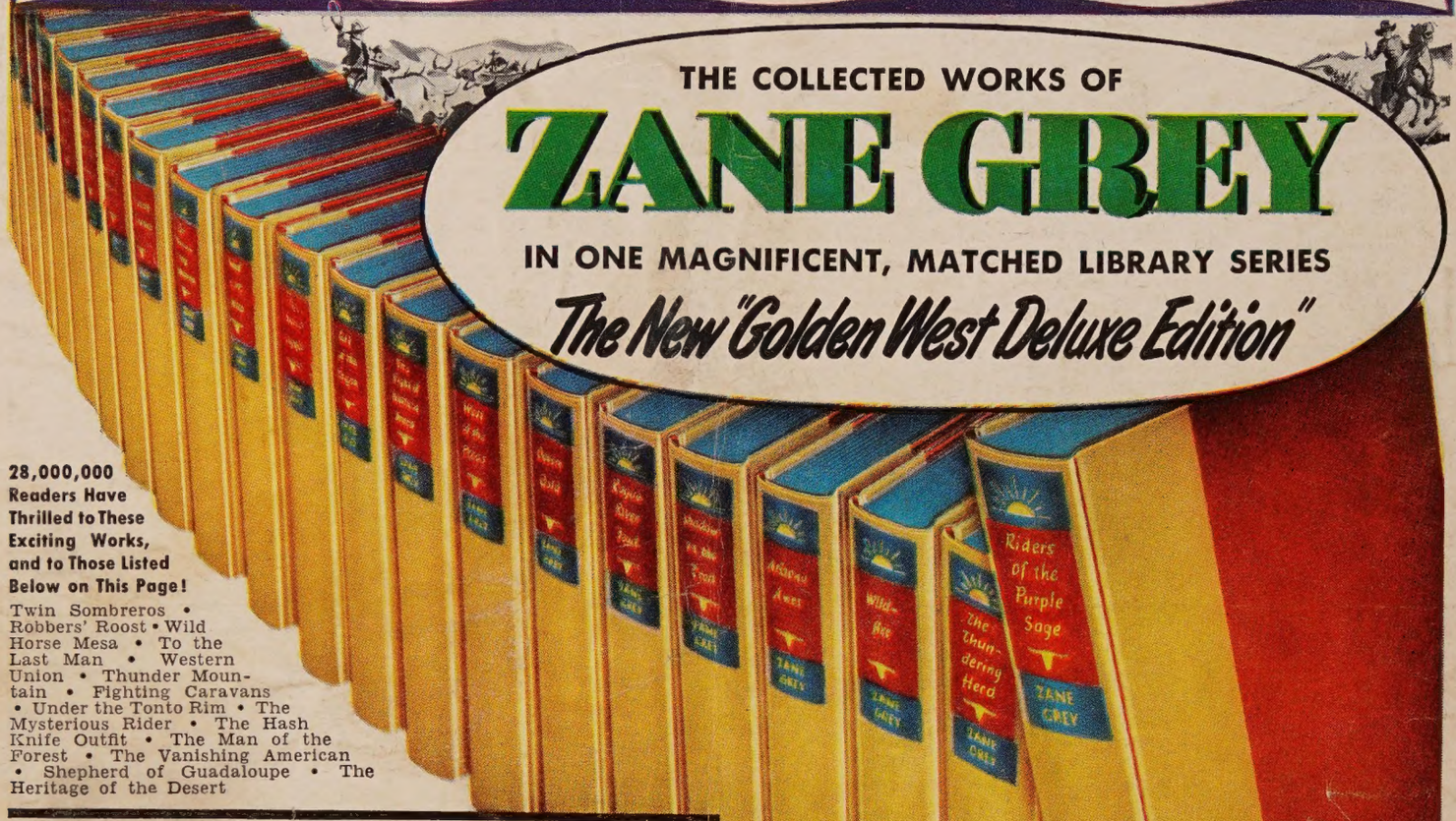

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